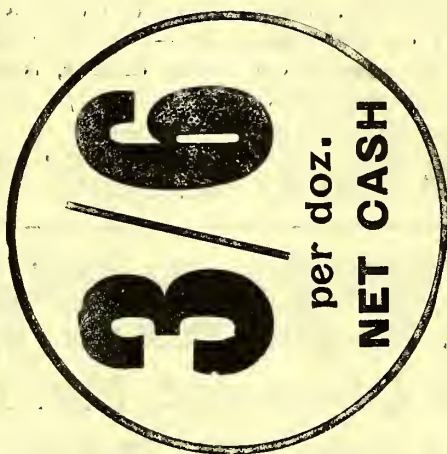


LEATH & ROSS'S HOMŒOPATHIC MEDICINES.

1/- Pilules

1/- Tinctures



1/- Camphor

(Essence or Pilules)

Handsome and attractive upright Counter Show Cases at **£3 3** and **£5 5**.
NO CHARGE WHATEVER FOR THE CASE.

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LEATH & ROSS,

WHOLESALE AND EXPORT HOMŒOPATHIC CHEMISTS,

9 VERE STREET, OXFORD STREET, W. (Wholesale Department), **LONDON.**
And 5 ST. PAUL'S CHURCHYARD, E.C.,

SPECIAL NOTICE TO CHEMISTS!

(FACSIMILE OF LABEL.)

A NEW
AND ENTRANCING
PERFUME.

Under Royal Patronage.



FLORAL,
DISTINCTIVE,
AND HIGH-CLASS.

Sold by all Leading
Chemists.

Having introduced a New Perfume, called the "Betrothal" Bouquet, which is dedicated, by gracious permission, to H.S.H. the Princess Victoria Mary (Princess May), we invite especial attention as being particularly appropriate in view of the approaching Royal Marriage. It will also form a souvenir for Fiancées, who will appreciate it as a reminiscence and a happy omen. It is a high-class Floral Perfume, and the name, in its application to Perfumery, is solely invested in us as a Trade Mark. The odour is quite new, very entrancing, and like our other specialities—is meeting with a good reception. The "Betrothal," which will form one of the series of our leading extracts, is put up in single ornate oval cases (in outers of three), and the price is $1\frac{1}{2}$ oz., 21/-; 3 oz., 40/-; and 6 oz., 80/- per doz.

J. GROSSMITH, SON & CO., 85 NEWGATE STREET, LONDON.

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Drug and Chemical Merchant,

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PURITY GUARANTEED.

Oleum Absinthii, Amygdalæ Dulcis, ditto Essent., Anisi (H. & W.), Bergamotæ, Caryophylli, Cognac, Coriandri, Geranii (Vimard & Co.), Iridis (Vimard & Co.), Juniperi, Lavendulæ, Limonis, Menth. Pip. (H. G. Hotchkiss), Pini Pumilionis, Sylvestris, Rosmarini, &c., &c., &c.

OTTO OF ROSE (Pure Virgin).

SPECIALITIES:—

CARAMELINE (substitute for Burnt Sugar). 20 times stronger than Caramel.

SOLUBLE ESSENCE OF ORRIS (Maubert Fils & Vimard).

CONCENTRATED PERFUMES, POMADES, FLOWER-WATERS.

Carbolic Acid, Liquid, 25 per cent.

Carbolic Acid, „ 50 „

Carbolic Acid, Liquid, 95 per cent.

Carbolic, Crystal, 35° to 70°.



**PREMIER
"VINOLIA"
SOAP.**

For the household
Per box
of 3 tablets 1/-
of 12 " 4/-
of 36 " 12/-



**FLORAL
"VINOLIA"
SOAP.**

For general private use.
Per box
of 3 tablets 1/6
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**BALSAMIC
"VINOLIA"
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For delicate sensitive skins.
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**TOILET
"VINOLIA"
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For the Toilet,
Nursery, and
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Per box
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**VESTAL
"VINOLIA"
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This is supreme.
Per box
of 3 tablets 7/6



**"VINOLIA" SHAVING
SOAP (Flat Cake).**
Delightfully perfumed.
Toilet, 2/-; Vestal, 4/6.

**"VINOLIA"
PREPARATIONS**



**"VINOLIA"
SHAVING
STICKS.**

Yield a most
soothing
substantial
lather.
Toilet,
1/-, 1/6, 2/6;
Vestal, 2/6.



**"VINOLIA"
SHAVING
FOAM.**
Refresh-
ing,
Emol-
lient.
Toilet,
1/-, 1/6;
Vestal,
2/6.



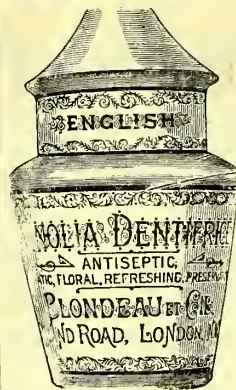
"VINOLIA"
For Itching,
Sunburn,
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Newsized 1/4
Small 1/9
Medium 3/6
Large 6/-



**"VINOLIA"
POWDER**
For the
Toilet, Nur-
sery, &c.
Newsized 1/1 1/2
Small 1/9
Medium 3/6
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**"VINOLIA"
DENTIFRICE**
Aromatic,
Antiseptic,
Tonic,
preservative
No. 2 (in
metal
boxes),
6d. and 1/-.



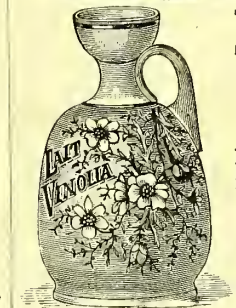
**"VINOLIA"
DENTIFRICE**

Contains no
Salicylic or
Mineral Acids
or Bleaching
Corrosive
Alkalies.
English, 2/6.
American 1/6.



**"VINOLIA"
POMADE.**

Natural to
the Hair
and Scalp.
In antique
vase, 5/6.



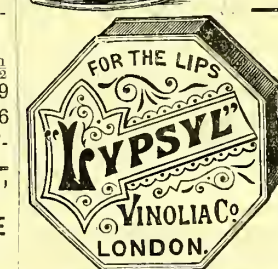
**"LAIT
VINOLIA."**

For the com-
plexion. Sooth-
ing, non-medi-
cinal, demulcent.
In elegant vase,
7/6.



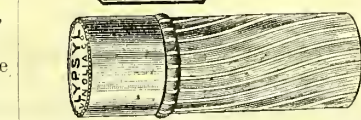
**"VINOLIA"
PERFUMES.**

Delicate, Pure, Con-
centrated. In fifteen
kinds. 1/9, 3/-, 5/-,
and 9/- each.



"LYPSYL"

A coralline
emollient
for the lips.
In flat
boxes 1/-; in
silver metal
tubes,
6d. and 1/-.



"VINOLIA" Brilliantine for the Hair.
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1/-, 2/-, and 3/6.

COOK'S PURE TOILET SOAPS.

SPECIALITIES:—COOK'S SAVON DE LUXE. The most luxurious soap made.

COOK'S "RIVIERA" (SUPER-FATTED). Specially prepared for delicate and sensitive skins.

SPECIALITIES MADE FOR THE TRADE.

COOK'S GOLD MEDAL ANTISEPTIC SOAP. (Thomson's Patent.)

For curing and relieving Eczema, Ringworm, and all skin affections.

SIX PRIZE MEDALS AT GREAT EXHIBITIONS FOR EXCELLENCE AND PURITY.

Can be obtained through

Messrs. S. MAW, SON & THOMPSON, LONDON, or from E. COOK & CO., LONDON.

JOSEPH WATSON & SONS,

MANUFACTURERS OF.

GLYCERINE

DOUBLE DISTILLED CHEMICALLY PURE, 1260 Sp.G.,

ALSO FOR

NITRO-GLYCERINE AND OTHER MANUFACTURING PURPOSES.

PACKED IN 10 AND 5 CWT. IRON DRUMS, TO BE RETURNED, AND IN 56 LBS. TINS FREE

WHITEHALL SOAP WORKS, LEEDS.

ALLCHIN'S SMELLING SALTS.

The increasing demand for these celebrated Smelling Salts has induced the Proprietor to bring them out in a more portable and elegant form than hitherto supplied. The New-shaped Bottles will be found well worth the attention of the Trade.

| | | | | |
|--|------|------|------|-----|
| WHITE FLINT GLASS, Hand omely Cut, 4 Sizes, Retail | 6d., | 1/6, | 2/-, | 2/6 |
| " " " Watch Shape, for the Pocket, 3 Sizes, Retail | 1/-, | 1/6, | 2/- | |

ALFRED ALLCHIN'S PHARMACEUTICAL PREPARATIONS.

SMELLING SALTS.—The MONOCARBONATE OF AMMONIA, manufactured by ALFRED ALLCHIN, is the Neutral Salt so much valued for the preparation of Smelling Salts. It retains its pungency as long as any Salt remains. 1-lb. bottles, 2s. 8d. each.

LIQ. AMMON. ODORIF., or VOLATILE ESS., for Allchin's Ammon. Monocarb. In Stoppered Bottles, 4-oz., 1s. 8d.; 8-oz., 3s.; 16-oz., 6s. each.

PUNGENTS, with handsome Cut Stoppers, filled with Allchin's Smelling Salts, 8s. per doz.; retail 1s.

OL. ROSE CONCENT.—One ounce of this Concentrated Solution of Anchusine, mixed with two pounds of Oil will give it the usual colour; it is also admirably adapted for colouring Pomades, Lip Salve, Camphor Balls, &c. 4s. per lb.

OL. FLAV. CONC.—One ounce, added to two pounds of Pomade, will give the usual golden colour, which is permanent. 4s. per lb.

SOLE PROPRIETORS—

W. BUSH & CO. (late Allchin), Chemists, 94 Richmond Road, Barnsbury, LONDON.

TO BE HAD OF ALL THE WHOLESALE HOUSES

SYMES & CO. LIVERPOOL

PHARMACEUTICAL CHEMISTS, EXPORT DRUG MERCHANTS,

IMPORTERS OF BRAZILIAN DRUGS, AMERICAN AND CONTINENTAL SPECIALITIES

ORIGINATORS AND

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OL. LAVAND. RECT.

Largely replacing the Mitcham Oil, 21/ lb.

Hydrobromic Syrup of Hypophosphites.



LAC BISMUTHI.

OL. LIMONIS RECT.

Fine quality, keeps well. 6/6 lb.

Lac Bismuthi et Cerli, &c.

SPECIAL MIDSUMMER OFFER

MADE TO PURCHASERS OF F. S. CLEAVER'S

JUVENIA SOAP.

An EXTRA DISCOUNT of 5 to 10 per cent. allowed.

In addition to their wholesale discount, F. S. Cleaver & Sons will make the following special Midsummer allowances on any order of not less than £2 and not exceeding £25 net, for Juvenia Preparations, received by them from June 24, 1893, to June 30, 1893, inclusive :

On orders amounting to not less than £2 net, an extra discount of 5 per cent. will be allowed, and the goods sent carriage paid.

On orders amounting to not less than £5 net, an extra discount of 7½ per cent. will be allowed, and the goods sent carriage paid.

On orders amounting to not less than £10 net, an extra discount of 10 per cent. will be allowed, and the goods sent carriage paid.

No orders received before June 24, 1893, or after June 30, 1893, or amounting to less than £2 or more than £25 net, will be executed on these terms.

PRICE LIST.

| | | | | | |
|-----------|--|-----------------------|------------|---|------------------------|
| No. 96 | JUVENIA TOILET SOAP; 1st Quality, in Gold-covered Boxes of 3 Wrapped Tablets each. | per doz. Boxes, 12/- | No. 431 | JUVENIA CREAM. In Gold- bronzed Tins. Each Tin in a Gold-covered Box. | per doz. Tins . 9/- |
| | Packed 6 Boxes in an Outer Box | | | Packed 6 Boxes in an Outer Box | |
| 97 | JUVENIA TOILET SOAP; Smaller Tablets. Each Tablet in a Folding Case. | per doz. Tablets, 4/6 | 416 | JUVENIA TOOTH POWDER. In Gold- bronzed Tins. Each Tin in a Gold-covered Box. | per doz. Tins . 9/- |
| | Packed 6 Tablets in an Outer Box | | | Packed 6 Boxes in an Outer Box | |
| 97A | FAMILY JUVENIA TOILET SOAP. Wrapped. | per doz. Boxes, 10/- | 230 | JUVENIA PERFUME. In Square Bottles containing 1 oz. with Gilt Sprinkler Cap. | per doz. Bottles, 16/- |
| | In Boxes of 3 Tablets each | | | Packed 6 Bottles in a Box | |
| | In " 6 " " | per doz. Boxes, 19/- | | | |
| | In " 12 " " | per doz. Boxes, 36/- | | | |
| 98 | JUVENIA SHAVING STICK, 1st Quality. Each Stick in a Gold-covered push-up Case. | per doz. Sticks, 8/- | 281 | DITTO, DITTO. In Square Bottles containing 2 oz., with Gilt Sprinkler Cap. | per doz. Bottles, 28/- |
| | Packed 6 Sticks in an Outer Box | | | Packed 3 Bottles in a Box | |
| 415 | JUVENIA TOILET POWDER, in Gold-cover- ed Boxes. | per doz. Boxes, 8/- | 390 | JUVENIA BRILLIANTINE. In Square Bottles, with Sprinkler Cap. | per doz. Bottles, 8/- |
| | Packed 6 Boxes in an Outer Box | | | Packed 3 Bottles in a Box | |

MANUFACTORY:—32, 33 & 34 RED LION STREET, HOLBORN, LONDON.

STOCK KEPT IN LONDON

SOZIO & ANDRIOLI

ESTABLISHED A.D. 1757.]

GRASSE (Alpes Maritimes), FRANCE.

Neroly, Lavender, Geranium, Orris, Patchouly, Thyme, Rosemary, Spike, Santal, &c.

CONCENTRATED PERFUMES.**CONCRETE ESSENTIAL OILS.**FLOWER POMADES at the highest possible Saturation. ROSE & ORANGE FLOWER
WATER, Sweet Almond Oil.

London Agent—MR. FREDK. BOEHM, 4 CULLUM ST., E.C.

STOCK KEPT IN LONDON

R C TREATT

Dunster House Mincing Lane

LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose**ESSENTIAL OILS**Wholesale
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onlyAPPLICATION
ONQUOTATIONS
AND

PRICE LIST

COCKING'S JAPAN OIL OF PEPPERMINT.

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all those polymeric products of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits of wine.

COCKING'S JAPAN MENTHOL CRYSTALS.

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting-point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, &c., see special circulars, to be had on application.

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GENUINE EAU DE COLOGNE

Johann Maria Farina }
Gegenüber dem Laurenz Platz } 2 oz., 7/6, 4-oz., 14/-; ½-pints, 21/-, pints, 42/-; quarts, 84/- per doz.
The second largest sale amongst Chemists in the U.K.

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Hydrogen Peroxide, Indigo Extract, Soluble Indigo Powder, Orchil, Cudbear, Logwood Extract, Fustic Extract, Aniline Dyes, Fine Lakes for Lithographic Inks, Vermilionettes, Drysalteries.

Sole Agents in United Kingdom and Colonies, excepting Canada, for

The New Bleach, **SODIUM PEROXIDE** (Aluminium Co., Ltd.).

The Chemist & Druggist

SUPPLEMENT.

Businesses Wanted
Businesses for Disposal
Premises to Let
Auction Sales

SATURDAY, JUNE 24, 1893.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

PLEASE NOTE.

A DVERTISEMENTS for this Supplement must be received at the Office, 42 Cannon Street, E.C., not later than 5 o'clock on Thursday Evenings, for insertion in the current week's issue.

Advertisements must be prepaid. Remittances by post may be made in stamps, or by postal order made payable to "EDWARD HALSE," and crossed MARTIN'S BANK (LIMITED). To ensure prompt attention address all communications, endorsed "Supplement," to the PUBLISHER of "THE CHEMIST AND DRUGGIST."

A COPY of this Supplement is inserted in every number issued of THE CHEMIST AND DRUGGIST. The Supplement will be sent free by early post on Friday morning to any person connected with the trade who will send in advance a stamped addressed newspaper wrapper for it, or will be given to any applicant at the Office after 9 A.M. on Fridays.

The Circulation of THE CHEMIST AND DRUGGIST largely exceeds that of any Journal in the world in connection with the trade represented.

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MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£900.—LONDON, W.—Dispensing and General Retail, situate in a thickly-populated middle-class neighbourhood; returns £900 yearly; well-fitted shop and good house; the business is *very profitable*, and suited to a good Prescriber; about 1 year's returns required.

2.—£1,500.—CITY OF LONDON.—Established Ready-money Business, with handsomely-fitted shop; returns £1,500 yearly; splendid position; well-adapted for extension into foreign Pharmacy; the *profits are large*, and the class of business very good; convenient premises; price about £1,650.

3.—£1,000.—LONDON, W.—Very old-established Business; first-class position; handsome shop; commodious premises; large and convenient house; present returns £1,000; can, by personal attention, be largely increased; price £1,250; full investigation; lease to be granted.

4.—£600.—LONDON, S.W.—Retail and Dispensing Business; good class; situate in a main thoroughfare; returns between £600 and £625; *very good profits*; increases yearly; double-fronted well-fitted shop; price about £550.

5.—£600.—NEAR THE CRYSTAL PALACE.—Good-class Dispensing and Retail; situate in a good residential district; well-fitted shop and good stock; returns £600; comfortable house and garden. Price £550.

6.—£700.—LONDON, N.W.—Light Retail, Dispensing, &c.; established Business; held by vendor about six years; returns over £700 yearly; *very good profits*; situate in main road; well-fitted shop and good stock; good 8-roomed house. Price £550.

7.—£400.—LONDON.—Easterly Suburb.—Light Retail and Prescribing Business; has been conducted by an Assistant; returns average £400; all good profitable business; comfortable house and garden; low rental; about £300 required. Well adapted for a branch from a good house.

8.—£1,450.—LONDON (about 40 miles from).—Very old-established Retail and Dispensing Business, offering capital facilities for extension into Agricultural and more General trade; returns £1,450; *profits large*; well-fitted double-fronted shop; premises large and convenient; price £1,100, or valuation if preferred.

9.—£350.—HAMPSHIRE.—General, Retail, Prescribing, and Dispensing; situate in a rural district; returns average nearly £350; *very good profits*; double-fronted good-sized shop and good stock; good 9-roomed house with garden; rent low; held on lease; price about £300; good opening for Dentistry.

10.—£1,000.—CAMBRIDGESHIRE.—First-class Dispensing and Retail, with some Agricultural business; very old-established; returns £1,000 yearly; admits of considerable extension; handsome shop and good stock; very convenient business premises and large house; full investigation invited; price £150; stock and fixtures at valuation.

11.—£500.—EASTERN COUNTY.—Dispensing and Prescribing Business; old-established business, at present conducted by an Assistant; returns about £500; full prices for all except patents; *very good profits*; single-fronted shop and good stock; comfortable house at low rental; price about £425; good opportunity for a young beginner.

12.—£400.—KENT (on the Thames).—An old-established Business; Retail and Prescribing; returns £400; *all very profitable*; small shop; rent nearly all let off; price about £300.

13.—£400.—KENT (Seaside).—Retail Business, established many years, situate in the centre of a favourite watering-place; returns £400; full prices; good-sized house, easily let in the season; price, to be arranged, about £300; vendor retiring from business.

14.—£750.—NORFOLK (large Market town).—Dispensing and Retail; returns about £750 yearly; established many years; well-stocked shop and good-sized house; price about £500.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

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TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London Agent.

NOTICE.—Messrs ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

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VALUER, LEICESTER,

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References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

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F. J. BRETT is prepared to estimate or to value entire stocks at they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

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Established 1870.

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Having been for the past 22 years solely engaged in the Sale, Purchase, and Valuation of Chemists' Businesses, we have, as Transfer Agents and Valuers, the largest experience of any in the Trade. VENDORS placing their businesses in our hands for transfer may in all cases rely upon a speedy sale being effected without undue publicity. Terms forwarded post free on application. No sale, no charge.

NO CHARGE TO PURCHASERS1.—**HOME COUNTY.**—Old-established first-class Dispensing Business, having a large and convenient house attached, with garden; elegantly-fitted shop, heavily stocked; price about £2,500.2.—**HOME COUNTY.**—Old-established first-class Dispensing Business, in same hands 40 years, doing a large and profitable business; good house, with large garden; price about £1,400.3.—**WEST OF ENGLAND.**—Good-class Retail and Dispensing Business; returns £1,800; nearly 10,000 prescriptions yearly, and can be increased; elegantly-fitted shop; splendid position; price £1,050.4.—**SOUTH COAST.**—Light Retail and Dispensing Business; same hands many years; returns £1,400 at good prices; good house, very handsome shop; well stocked; price £1,100, or offer.5.—**SOUTH-EAST COAST,** practically unopposed, Light Retail and Prescribing Business, returning £450; good prices obtained; capable of doing double; low rent; good house, pleasantly situated; price £350.6.—**SOMERSET COAST.**—Light Retail and Prescribing Business; same hands many years; retiring; returns £500, full prices; low rent; price £350; trial allowed behind counter if required.7.—**SUFFOLK.**—Unopposed Business in large village; returns £800; good prices; low rent; good house with garden; no near opposition; same hands 20 years; price £500, or offer.8.—**LONDON, N.W.**—Good-class family Retail and Dispensing Business; returns £1,500, and making about one-third net profit; fine increasing position; selling through serious illness; price £1,250, or offer; strictest investigation allowed.9.—**LONDON, W.**—Light Retail, Dispensing, and Prescribing Business; returns are about £1,000; well situated in main road; good house and garden; shop well fitted and stocked; price £650, or offer.10.—**LONDON, N.W. (Main Road).**—Retail and Dispensing Business; returns average £500 yearly; price £130; good opportunity for enterprising man; can be considerably improved.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

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3s 6d. for fifty words; 6d. for every 10 words beyond.

CHEMISTS requiring a Business where a capital of £1,000, and in another case £1,250 can be safely invested, please apply to "Ipecac," c/o Evans, Sons & Co., Liverpool.**LONDON.**—An old-established Light Retail and Dispensing Business, in a good position, to be had on easy terms. Apply, personally, or by letter, 13 Prince of Wales Road, N.W.**INCREASING** Mixed Drug Business near East Coast; returns £580; no fixtures to take to; price about £300. Apply by letter, B.W., c/o Messrs. Lofthouse & Saltner, Hull.**CHEMIST** and Veterinary Practice.—To be disposed of, in consequence of death of late owner, a genuine Mixed Country Business, with splendid outdoor Veterinary connection; situated in the midst of thriving agricultural district; a splendid opportunity for an energetic man. Apply, in first instance, W. J. E., 39 High Street, Islington, London, N.**CROCKER & CO.**

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Trade Valuers, Transfer Agents, and Accountants,
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Having numerous inquiries for good-class Country Businesses they invite communications from intending vendors.

NO CHARGE IS MADE UNLESS A SALE IS EFFECTED.**VALUATION ONLY.**—First-class Dispensing Business, in fashionable health resort on the South Coast; splendid opportunity for a young and energetic man to acquire an excellent business upon favourable terms.**NORTH BRITAIN.**—First-class Retail and Dispensing Business returning under manager £1,150; net profit £500; price £1,000; pleasantly situated in main street of fashionable city.**LINCOLNSHIRE.**—General Country Retail trade; returns £1,000; price £550; handsome shop; good house and garden.**HOME COUNTY** (50 miles from London).—Death vacancy; returns £750; valuation; fine large house and nice garden.**ANDROS & CO.,****Chemists' Transfer Agents & Valuers,****67 SHIP STREET, BRIGHTON,**

Invite those who are desirous of disposing of their Businesses to forward full particulars.

NO SALE, NO CHARGE.

Inclusive terms, no extras whatever, and no charge to purchasers.

HANTS.—Good-class Retail, Dispensing, and Prescribing Business; handsome Pharmacy; established over 50 years; low rent; price £600.**SOUTH COAST.**—Light Retail and Prescribing; good house and garden; returns £400; price £300.**NOTTS.**—Unopposed Business; good returns under neglected management; great scope for increase; price £175.**LINCS.**—Old-established General and Retail Business; handsome shop; good house and garden; returns £1,000; price £550.

Messrs. Andros & Co. are in immediate want of a good-class Business in North Yorks or county Durham; also one in or near Birmingham. Clients waiting with cash.

BUSINESSES FOR DISPOSAL—Cont.**£180 CASH.**—Bona-fide Seaside Business; lock-up; rent £18; small working stock; owner retiring; season commencing in July; capable of great extension. Apply, N., 94 Regent Road, Morecambe.**CHEMIST'S** Business for immediate sale; situated in a prominent position in market town; stock and fixtures at valuation; good opportunity for a pushing man. X., 159 Oxford Road, Reading.**£120.**—**LONDON, N.W.**—Splendid opportunity for young man, as half rent can be made by re-letting; main road; excellent position; rent £70. Apply, 233/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**BY** order of the Executors, with immediate possession, the Stock, Goodwill, and Fixtures of an old-established Surgeon and Chemist, in a busy part of North London; low price. Particulars of Edwin A. Young, Auctioneer, 150 Curtain Road, E.C.**NORTH.**—£1,400; returns increasing; very few patents; several valuable specialities; capable of great extension under personal supervision; price about £900. Address, "Excelsior," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**IN** a small market town near Gloucester, a Light Retail and Prescribing Business; returns £550; good profits; double-fronted well-fitted shop; good stock; convenient house; price £350; satisfactory reason for leaving. "Cologne," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**AT** very low price for cash; General Business, where good Prescribing, Dispensing, have been done; excellent opening for young man commencing or Cutting Store; lock-up shop, with bedroom if required, at low rental. Apply, "Statin," c/o Messrs. Southall Bros. & Barclay, Birmingham.**COMPLETE** and costly Fittings in mahogany, with stock of a Chemist's Business, to be sold (a great bargain), in consequence of serious illness of proprietor, with glass cases and all complete; a rare opportunity to anyone commencing business. Apply, in first instance, to "Chemist," Raines & Co., York.**LIGHT** Retail and Dispensing Business, in a first-class residential locality within 40 miles of London, having an exceptionally good house and garden; cash required about £1,500; Principals only treated with; references required. "Pharmacy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN—Cont.

SOUTH AFRICA.—Assistant, with Minor qualification, at once. All particulars to Douglas, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR China.—An Assistant, with first-class experience and unexceptionable references. Address, 49/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Junior Assistant; indoors; aged about 21 years. Apply personally, or write (enclosing photo), to J. Skewes, Chemist, 2 Upper Street, Islington, London, N.

DISPENSER (outdoors) wanted, for evenings only, at a Surgeon's Dispensary, in West London. Apply by letter only, giving full particulars, to "Vesper," 48 Portsdown Road, W.

WHOLESALE.—Wanted, an Assistant, with some experience of manufacturing, and to superintend a workroom; aged about 25; not necessarily qualified. Apply, by letter, to L., 14 Brixhill Row, London.

JEWSBURY & BROWN, Manchester, require a qualified Assistant as Dispenser; outdoors; must be thoroughly competent. Applications, enclosing references and photo, to W. Kirby, 113 Market Street, Manchester.

IMMEDIATELY (indoors), good hand, about 25; principally Counter; cash business; liberal salary to anyone suitable and seeking permanency. Apply, stating fullest particulars, to L., 215 Finchley Road, N.W.

KENT COAST.—Assistant wanted, accustomed to high-class Retail, and a quick, reliable Dispenser. Apply, stating age, height, particulars of experience, and salary required, enclosing photo, to Frederick March, Westgate-on-Sea.

MANCHESTER ROYAL INFIRMARY.—Junior Assistant Dispenser; Minor qualification; not over 30 years of age, and unmarried; salary £20 per annum; hours 8.30 to 6. Apply, at once, to General Superintendent.

GENEVA, Switzerland.—For 1st or 15th July, a qualified gentleman required for a high-class Pharmacy; good opportunity of learning French; year's engagement; 1st "semestre" 180 francs, 2nd 200 per month, outdoors, with passage paid from London. Send photo and full particulars, Grande Pharmacie, Finck.

WANTED, services of an elderly Chemist, or one of impaired health, registered, for a Country Retail in North of England; duties nominal; would suit a person wishing to supplement his present income. State salary and other particulars to "Chemist," c/o Messrs. Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

QUALIFIED Assistant wanted; must be a gentlemanly and steady man, with qualification; applicants to state references, salary required, and whether in or out door engagement preferred; constant employment is offered to a suitable man. Apply, A. B., c/o Wright, Layman & Umney, 48 and 50 Southwark Street, London, S.E.

F. H. BOWDEN, Pharmaceutical Chemist (by examination), Buxton, has a vacancy for a well-educated youth in a good Dispensing Pharmacy, where a thorough knowledge of the trade can be acquired, to work under direct supervision of principal; every facility afforded for study; sharp youth who has passed Preliminary preferred.

WANTED, trustworthy registered Assistant, of good address and business capacity, to Manage Mixed country Retail and Prescribing business in county of Durham; married, to live on the premises; good references; one seeking a permanency preferred. State full particulars of experience, salary, age, &c., to "Pharmacist," W. Figgitt, Wholesale Druggist, Thirsk.

AN Assistant (single) to take charge of a Branch; pushing Counter-man. State terms (furnished apartments only found), age, height, with whom last and how long; if photo sent, will return; or personal application preferred between 12 and 2 or 5 and 6, at Morris, Chemist, 23 West Green Road, Tottenham, London, N., close to Seven Sisters, Great Eastern Station.

CAPE Colony.—Assistant wanted immediately; single; must be a good Dispenser, and preference given to one accustomed to Country trade; Minor qualification; aged about 25; salary, first year, £140; second £150; third £160; sleeping accommodation provided; second-class passage paid out; candidates must hold first-class references. Apply to "Cape," Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, London.

A JUNIOR Assistant (outdoors), of gentlemanly appearance and address, for a select Branch Pharmacy under Manager, required the beginning of August for the season; an exceptional opportunity for a neat and accurate Dispenser requiring increased experience. Apply, giving references, stating weekly salary required, and enclosing photo (to be returned), to R. Hayton Davis, Pharmacist, High Harrogate.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR; 22; 7 years' experience; good references. Hardy, Sutton-in-Ashfield.

LOCUM or Manager; qualified; 25; good experience. F. S., 393 Commercial Road, E.

LOCUM-TENENS; 24; qualified; London experience. J. J., 196 Belsize Road, N.W.

ASSISTANT; qualified; Branch or otherwise; in or out. H., The Poole, Hereford.

JUNIOR; 21; 6 years' experience; permanency preferred. "Bismuth," Alvechurch, near Redditch.

TEMPORARY; permanency; 18 years' experience; tall. "Statim," 79 Gillespie Road, Highbury, N.

MINOR requires situation on Continent; Paris preferred. "Chemists," 85 Alexander Street, Newcastle.

PART-TIME; good London Dispensing experience; 21; disengaged. W. B., 65 Torrington Square, W.C.

CHEMIST'S Bookkeeper desires evening engagement; disengaged. 6.30. W. T., 22 Elaine Street, S.E.

SHORTLY, as Manager; resident or outdoors; permanency. A., Wykelm Road, Earley, Reading.

7 YEARS' experience; good writer and Dispenser. "Assistant," Aldbourne House, Preston, Brighton.

DISPENSER to Surgeon; highest references; disengaged. Address, "Dispenser," 56 Hills Road, Cambridge.

QUALIFIED; 9 years' experience in good business; 25. Mr. Davies, Cleadda, Llanwrin, Machynlleth.

MANAGER; by day, week, or month; disengaged; qualified. A. B., 69 Adolphus Street, New Cross, S.E.

MANAGEMENT; day, week, or month; disengaged July 3. Rickaby, Pharmaceutical Chemist, Abingdon.

AS Locum; London; aged 32. "Belladonna," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT or Locum; 30; unqualified; good references. May, Country Farm, Orsett, near Grays, Essex.

SITUATION wanted in Wholesale; 9 years' Retail; aged 24. Heywood, Bridge Street, Heywood, Lancs.

WHOLESALE.—Competent, energetic man, every branch; married. "Aurum," 47 Lincoln Road, Horncastle.

WHOLESALE and Manufacturing; as Manager or otherwise; experienced. "Salol," 362 City Road, London.

LOCUM-TENENS; town or country; qualified; experienced. "Auror," 89 Pensonby Buildings, Blackfriars.

ASSISTANT or Manager; qualified; good reference; Prescribe and Extract. B., 7 Carlton Terrace, Tooting, S.W.

AS Assistant (outdoors); aged 29; 14 years' experience; unqualified. J. Blewitt, 13 Hannant Street, Thornaby-on-Tees.

ASSISTANT or Manager; married; for good-class or Store business; attainer; aged 28. "Rex," 72 Peel Street, Hull.

JUNIOR; 19; disengaged month hence; London (outdoors) preferred; excellent references. Hall, 509 Pall Mall Road, S.W.

JUNIOR; 20; height 6 ft. 5 years' experience; Liverpool or vicinity preferred. L. E. Thomas, Plasynllan, Cilcen, Mold.

DISPENSER, Medical, Wholesale, or Temporary; experienced; qualified; outdoors. "Chemist," 96 Tams Road, W.

ASSISTANT; 25; qualified; highest references; City experience; outdoors. "Statim," 23 Dauntam Street, Haggerstone, N.

JUNIOR; in good Dispensing business; 4 years' experience; excellent references. "Alpha," c/o Mr. E. S. Bradley, Ashbourne.

AS Junior; 22; 6 years' experience; 5 ft. 10½ in.; London or Eastern Counties preferred. Woodward, Old Newton, Stowmarket.

AURIAN gentleman wishes to enter a Wholesale Druggist's. Mr. Z., Deacon's Advertising Offices, 154 Leadenhall Street, E.C.

BUSINESSES FOR DISPOSAL—Cont.

£150 or Valuation.—Must be sold at great sacrifice; no reasonable offer refused; satisfactory reason for disposal; £7 per week has been done by a recent manager. Apply, L. Page, 7 Carlton Terrace, Merton Road, Tooting Graveney.

CHEMIST and Druggist's for sale; splendid opening for dispensary; unopposed main road position, S.E.; low rent; profits £4 to £5 weekly, can be largely increased; price £60 for fixtures and goodwill, stock at value about £40. Apply, Day, Thomas & Co., 111 London Wall, City.

MANCHESTER.—Old-established and unopposed Retail and Prescribing Business; well-fitted shop and good house, land at rear; low rent; price £330; exceptional chance; satisfactory reasons for disposal. For full particulars apply to Andros & Co., Chemists' Transfer Agents, 67 Ship Street, Brighton.

£250.—A PROFITABLE Retail and Prescribing Business in large Midland town; returns about £600, great scope for increase; present proprietor entering Dental profession sole reason for giving up; fuller particulars on application. Write, "Dental Surgeon," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

To Prescribing Chemists or Medical Men.—An exceptional chance; good 8-roomed house; 8,000 population; no other Chemist, and at rear; Medical Man; well fitted and stocked Pharmacy, returning £200 under youth only; can be secured for £80; double can be done immediately by good man. "Chemist," 184 Dalston Lane, London.

SURREY. Stock, Fixtures, Implements, &c., of Light Retail, Dispensing, and Prescribing Business; splendid opening for Dentistry; returns about £300, can easily be doubled; full investigation; any reasonable offer accepted; worth inspection; must be sold by end of present month. Apply, "Homatropinum," c/o Messrs. Herrings & Co., Aldersgate Street, E.C.

HANTS (32 miles from London).—Good Retail and Prescribing Business; no cutting; good living for unqualified man, sure fortune for a qualified man, as the place is rapidly increasing; 18 years' lease at £26 per annum; only one Chemist besides; 7,000 population; price £300, or value of stock, fixtures, and lease. "Chemists," c/o J. Meadmore, 7 Market Place, Farnborough, Hants.

EASTERN Counties; good town; Prescribing and Cash Retail Business; established over 40 years; some excellent proprietaries; Dentistry could be added; low rental; lease; returns £730 last year, increasing; price £650; every investigation; no abatement; references to drug-houses; no agents. "Eastern," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LIVERPOOL.—For immediate disposal, a compact, old-established Dispensing Business; present returns £450, plenty of scope for increase; much neglected through ill-health; same hands over 20 years; proprietor retiring; full prices for everything; good house; rent £32; lease can be had; net profits £200. Apply, in first instance, Mr. Child, c/o Southall Brothers & Barclay, Birmingham.

To Chemists and Druggists.—Grand established Business (Family and Shipping), together with the splendid commodious corner premises; best business position for town and dock trade; splendidly fitted and stocked; satisfactory reasons for relinquishing business; strictest investigation courted; genuine. Only those with capital need apply to "Chemist," Daily News Office, Cardiff.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, in the East-end of London, a Cash Retail and Prescribing Business, suitable for a Surgeon; state rent, receipts, what scope, and price required; must have side entrance, and as near City as possible. Apply, "Doctor," 28 Shepherd's Bush Green.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CHEMIST'S Shop (Garbutt's), first-class old-established, to let, 14 High Street, Gateshead; no ingoing required; good opening; rent moderate. Apply to W. Munro & Co., Wine Merchants, Gateshead.

OXFORD STREET.—To be Let, splendid Shop, premises occupying one of the finest positions in the West End; admirably suitable for a Chemist and Druggist, or any business the success of which mainly depends upon handsome premises in a fine prominent position commanding exceptional publicity. Apply to Messrs. Marler & Bennett, 175 & 176 Sloane Street, Belgravia, S.W.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

To Chemical Manufacturers, Analysts, and Others.—A young man, with a knowledge of Chemistry, who could introduce a little capital, is desirous of a Partnership; London preferred; principals only dealt with. 216/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PHARMACEUTICAL Chemist, experienced in the management of Manufacturing Laboratory, and having good Analytical qualifications, is open to negotiate for a Partnership or equivalent position in a well-established Wholesale firm. "Hembaue," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST.—Managing Partner required for a Chemist's business in Rangoon; good opening for an energetic and pushing young man holding the qualifications of M.P.S.; salary £10, rising to £20 in 3 years, with prospects of increase if business pays well; must possess capital to invest in business. Apply to the Surgical Hall and Co-operative Dispensary Co. (Limited), Rangoon, British Burma.

SALES BY TENDER.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

To Chemists and Druggists, Grocers, Patent Medicine Vendors, Oil and Colour Merchants, Wine and Spirit Merchants, and others.

Re WILLIAMSON'S DRUG COMPANY (LIMITED), PENRITH.
In Liquidation.

To be SOLD by PRIVATE TENDER, either altogether or in lots, the STOCK-IN-TRADE of the above Company, comprising Drugs, Patent Medicines, Groceries and Italian Warehouse Goods, Wines and Spirits, Oils, Paints, Colours, and Varnishes, &c., amounting at stock-book prices to £631 12s. 2d.

The stock-in-trade, &c., with detailed inventory thereof, may be viewed and inspected on the premises, 4 King Street, Penrith, aforesaid, until and on Friday, June 30, 1893, between the hours of 9 A.M. and 6 P.M. each day. Conditions of sale and forms of tender may be obtained gratis of Mr. H. Todd, Accountant, Penrith, the Liquidator, who will receive Tenders up to 9 o'clock A.M. on Saturday, July 1, 1893. Penrith, June 20, 1893.

TENDERS.

ST. MARY'S HOSPITAL, LONDON, W.

CONTRACTS FOR DRUGS, CHEMICALS, DRESSINGS, &c.

THE Board of Management is prepared to receive Tenders for the supply of Drugs, Chemicals, Dressings, &c., for the three months ending October 15 next. Forms of Tender can be obtained at the Secretary's Office. Tenders must be delivered in sealed envelopes by 10 o'clock A.M. on Thursday, June 29, addressed to the undersigned, and marked "Tender for Drugs" or "Tender for Dressings." The Tenders must be accompanied by samples of certain articles, as required. The Board does not bind itself to accept the lowest or any Tender. By order,

THOMAS RYAN, Secretary.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

STUDENT, passed Preliminary in 1892, seeks help in Dispensing at a London Chemist's during summer; small premium offered. B. W., 272 Portland Road, South Norwood.

JOHN EKINS, Chemist, 97 High Street, Bedford, has a vacancy for a well-educated youth as an Apprentice; must have passed the Preliminary, or its equivalent; premium required.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, qualified Assistant as Dispenser; 3 kept. Miles, 165 Edgware Road, W.

WANTED, Locum-Tenens; youth just qualified. Apply, J. Parker, Chartered Accountant, Sunderland.

At once; Improver; outdoors. Please give full particulars, Knight, Pharmacist (Exam.), 45 West Gate, Peterborough.

An Assistant (from 25 to 28 years of age) wanted; indoors; accustomed to Light Retail and Dispensing; good Counterman; competent for occasional charge. Apply, with usual particulars, A. B., c/o Messrs. Barron, Harveys & Co., Giltspur Street, London.

SITUATIONS OPEN—Cont.

WANTED, an active Assistant; outdoors. Apply, stating salary and previous experience, to P. F. Cox, 107 Old Town Street, Plymouth.

QUALIFIED Chemist, about 30, to manage Mixed Branch; outdoors; porter and boy kept. State full particulars, Middleton, Oldmist, Nottingham.

QUALIFIED Assistant; outdoors. References, age, height, photo, salary required, and all particulars of experience, &c., to Mr. Garnett, Windermere.

WANTED, a qualified Assistant for the Retail Counter; outdoors. Apply, giving full particulars, to D. P. Roberts, Drug and Chemical Store, North End, Croydon.

JUNIOR Assistant wanted; indoors. Please state age, height, salary, when disengaged, and usual particulars, A. J. Wing, Chemist, 69 Powis Street, Woolwich, S.E.

JUNIOR Assistant or Improver, in good-class Dispensing business. State experience, age, and salary required, J. W. Feltwell, 91 Hammersmith Road, West Kensington.

WANTED, Assistant, unqualified, about 24, indoors, for good-class Country business; good references indispensable. Steward & Westover, Medical Hall, Kidderminster.

ASSISTANT wanted (indoors), about 23 years of age, accustomed to a good General Country business. Apply, with full particulars and photo, to Vaughan, Chemist, Oswestry.

WANTED, a qualified Assistant; outdoors; state age, reference, salary required, married or single. "Quereux," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR Assistant wanted, at once; one having served his apprenticeship in a select Dispensing business. Apply, with full particulars, to Whiston & Co., St. James's Square, Bath.

WANTED, immediately, by a Pharmacist in Liverpool suburb, a good Junior; outdoors. Send particulars to "Pharmacist," c/o Messrs. R. Sumner & Co., 50A Lord Street, Liverpool.

IMMEDIATELY; an Assistant, for Dispensing and Retail; if by writing enclose photo, stating age, height, and salary required. J. W. Taplin, 96 Craven Park Road, Harlesden, N.W.

REPRESENTATIVES wanted, in all parts of the United Kingdom, to canvass for orders; liberal commission. Address, "Manager," Marza Wine Company, 19 Wilson Street, London, E.C.

TEMPORARY Dispenser wanted at Paddington Infirmary, No. 225 Harrow Road, W., for 3 weeks in August; must be qualified. Apply to the "Medical Superintendent," as above.

JUNIOR Assistant, about 20, outdoors, for a General business. Apply, stating age, height, when disengaged, and salary required, with references, to R. Mumford, Chemist, Splotland, Cardiff.

ASSISTANT (Minor qualification), for a good-class Dispensing business. Apply, by letter, stating age, experience, references, and salary required, to Kemp, 10 Bedford Terrace, Kensington.

WANTED, Assistant; qualified; outdoors; no Sunday duty; abstainer preferred. Apply, stating age, references, salary required, &c., enclosing photo, to John Shaw, Chemist, Westwood, Oldham.

WANTED, Improver or Junior, for a Light Retail and Dispensing business. Apply, stating full particulars and salary required (indoors), and enclose carte, to Purnell, Chemist, Cheltenham.

WANTED, a qualified Junior Assistant for a Light Dispensing business; indoors; salary £50, and progressive; references indispensable. C., c/o Barron, Harveys & Co., Giltspur Street, E.C.

IMMEDIATELY; a Junior Assistant; indoors; total abstainer. Apply, stating age, salary required, enclose photo, with fullest references, to James Lees, Chemist, 76 St. Alban's Road, Watford.

WANTED, at once, for a Mixed Country business, a Junior or Improver; indoors. Apply, with full particulars, salary required, enclosing photo if convenient, to Davies, Chemist, March, Chads.

WANTED, immediately, a qualified Assistant; one with knowledge of Agricultural trade preferred; good references. Apply, in first instance by letter, W. J. E., 20 High Street, Islington, London, N.

A RESPONSIBLE Assistant, well up in his business; must be quick and good at Counter; not under 25; brisk cash business; 4 kept. Full particulars and references to Blackburn, 675 Holloway Road, N.

WANTED, an Assistant, about 26, accustomed to a Dispensing, Prescribing, and Light Retail business; salary £50. Address, with full particulars and references, to J. Woodcock, 75 Shaw Street, Liverpool.

WANTED, an Assistant, to take charge of a Branch for 2 or 3 months, aged about 25; must produce satisfactory references, and enclose carte (to be returned) to D. Prosser, Sheerness. State usual particulars.

COMPETENT Senior wanted, at once; one with slight knowledge of Dentistry preferred. Apply personally, or by letter, stating usual particulars, to Reese & Co., 55 Great Marylebone Street, Portland Place, London, W.

FOR INDIA.—Required, 2 Chemist's Assistants, with Minor qualification, aged about 25; must be energetic, of thorough business habits and good address. Apply, by letter, J. R. M., c/o Messrs. Meggeson & Co., 14 Miles Lane, E.C.

WANTED, at once, Junior Assistant for Light Country Retail; 40 miles from London. Applicants to state age, height, salary required, and experience, and to forward references, with photo, if practicable, Andrew, Chemist, Rainham, Kent.

WANTED, at once, Junior Assistant (indoors), in good-class Retail and Dispensing business. Applicants will please state usual particulars and give references, and enclose carte, to be returned, Poole & Son, Chemists, Newcastle, Staffordshire.

FOR July 1st.—A Junior Assistant, about 23, with Minor qualifications. Applicants will kindly forward full particulars as to age, height, salary required, references, &c., enclosing photo (which will be returned), to T. C. Taylor, 20 Long Row, Nottingham.

A GOOD Dispensing Assistant, aged about 24, accustomed to West-end or South Coast business; please state age, height, salary, and last situation. Mr. Garnell will take an indoor Apprentice on easy terms for 3 years. Gibbs & Garnell, Ryde, I.W.

WANTED, Improver or Junior Assistant, in first-class Retail and Dispensing business (indoors). Apply, stating age, height, salary required, and references, enclosing carte, and say when disengaged, to Metcalfe, Pharmacist, Whitefriargate, Hull.

ASSISTANT, for Light Retail and Dispensing; hours 8 to 8, Saturdays 10; weekly half-holiday during summer months. Apply, stating usual particulars and enclosing carte, if convenient (to be returned), Webb, Pharmaceutical Chemist, Colchester.

A JUNIOR Assistant wanted for a Mixed-class business; must be well recommended and steady; one accustomed to a Country trade preferred; hours short; state usual particulars; photo if convenient. H. Prosser Turner, Chemist, Lydney, Gloucestershire.

To Chemists and Druggists.—Wanted, in an old-established business in the North of England, an experienced Assistant. Address by letter, with full particulars as to age, salary required, &c., to T. J. T., c/o Messrs. J. Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

TRAVELLERS required, one for North and one for South of England, to call upon Aërated-water Manufacturers and Confectioners; thorough knowledge of requirements of above trade and connection indispensable. "Sicily," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARIS.—A qualified Assistant wanted, at once; must be accustomed to a good-class business, of gentlemanly address, tall and energetic; speaking French preferred; the best references required; outdoors; a liberal salary to good Salesman. Address full particulars, Major, Bureau de Poste 35, Paris.

MADRAS.—Required, Assistant, quickly; qualified; temperate and of gentlemanly appearance; second-class passage paid out; 3 years' agreement; salary 100 rupees monthly first year, 125 second, and 150 third, with board and lodging. Address, "Madras," c/o Messrs. Street & Co., Cornhill, London, E.C.

WANTED, at once, qualified Assistant, used to brisk Mixed Country business, who is a good Prescriber and Extractor. State age, height, experience, salary required (indoors), and references, which must be undeniable, also enclose photo (to be returned), J. Richardson, Chemist, Hatfield, near Manchester.

WANTED, an Assistant, Minor qualification, not under 23, of good appearance and address, for good-class Dispensing and Retail; hours easy; 2 apprentices kept; must have undeniable references. Apply, stating age, height, salary required, and enclose photo, to W. H. Bücher, Pharmaceutical Chemist, Truro.

MAJOR HILL, Chemist, Wisbech, will have a vacancy for a Junior, of good appearance and address, on July 6, accustomed to Light Retail and Dispensing; apprentice kept; no Sunday duty. Apply, with full particulars as to age, height, experience, salary required (indoors), and enclose photo (to be returned).

JUNIOR; abstainer; indoors; end of this month; about 20 years of age; hours 8 till 10, and alternate Sunday evening; at liberty Thursday afternoon and evening; salary £30. Apply personally, or enclosing carte, stating height and references, to Mr. Taplin, 91 Hampstead Road, London, N.W. Only one kept.

WANTED, a qualified Assistant, of gentlemanly appearance and address; well up in Dispensing; to an energetic man of business, producing first-class references, a liberal salary would be paid. State age, height, when at liberty, salary required (outdoors), and enclose photo, to Woolhate, Chemist, Taunton, Somerset.

SITUATIONS WANTED—Cont.

OUTDOOR Assistant; disengaged; abstainer; 11 years' experience; aged 26; height 5 ft. 8½ in. O. U., 78 High Street, Dorking.

WHOLESALE (Drugs); Assistant; 23; can wrap and mark well. "Aconite," 60 Union Road, Newington Causeway, London, S.E.

AS Traveller; thorough knowledge of Drugs, Patents, and Sundries; London house preferred. E. H., 46 St. James Road, Brixton, S.W.

LOCUM-TENENS, or Dispenser to a Surgeon or Assistant to a Chemist; disengaged. Address, W. B., 4 Aston Street, Birmingham.

WANTED, situation as Traveller, or in Wholesale; 6 years' Retail experience; good references. A. W., 26 Ethelbert Road, Margate.

DISPENSER to Surgeon; aged 30; tall; gentlemanly appearance, and highest references. "Dispenser," 217 Leytonstone Road, Stratford, London.

WHOLESALE (wet); experienced Assistant, can take charge if required; 28; good references. C. H. B., 4 Green Lanes, Newington Green, N.

MANAGER, view to purchase, small business or good Branch; town experience; 26; competent. "Minor," 23 Dunstan Street, Haggerstone, N.

MANAGER; qualified; permanent references; married; abstainer; 32; well up in all branches. "Garlick," 10 Parson's Green Terrace, Edinburgh.

PART-TIME; 21; 5 years' West-end experience; studying for Minor; requires engagement; outdoors. "Junior," 65 Milson Road, West Kensington.

WHOLESALE.—Respectable youth (17) requires a situation in Warehouse; been two years at Chemist's. W. Powell, 82 Riversdale Road, N.

JUNIOR (22) seeks situation; time for study; 9 years' experience; excellent references; abstainer. "Junior," 42 Hartismere Road, Fulham, S.W.

MANAGER or Assistant; 38; qualified; abstainer; Prescriber, Extractor, Salesman; references, 2 years present. 53 Upper North Street, Poplar.

YOUNG gentleman, aged 26, qualified, would like Temporary work in country or seaside; disengaged July 1. F. E. D., 45 Beresford Road, Canonbury, N.

MANAGER for Branch or Mixed business; qualified Chemist; 48; married; disengaged 30th inst. "Statim," 17 Banstead Grove, Roundhay Road, Leeds.

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AS General Assistant or Locum-Tenens; good references; moderate salary, aged 42; unqualified; varied experience. W. B. Collis, 1 Pickering Street, Hulme, Manchester.

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WANTED, by a married gentleman, qualified in Chemistry, a situation as Dispenser or Manager, Traveller, in any way. Address, H. W. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER; registered; experienced Prescriber and Extractor; married; satisfactory references; disengaged; Lancashire preferred. 227/21, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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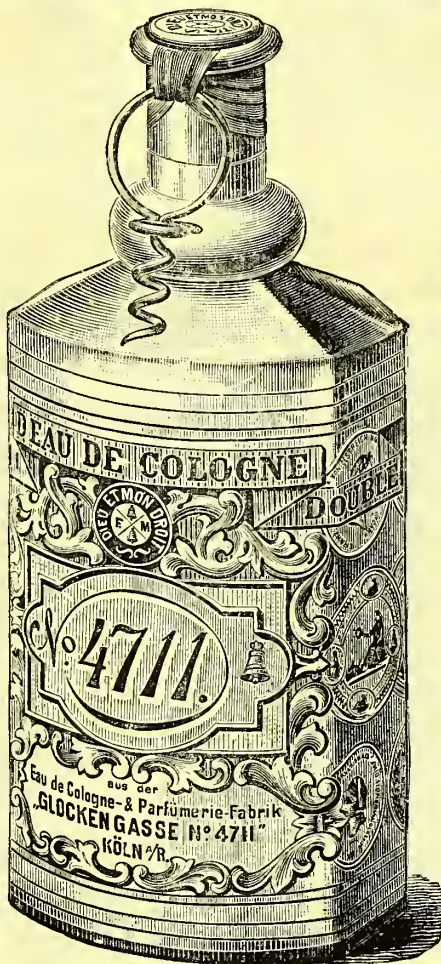
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| | | |
|--------------------|---------|------------|
| Mr. ALFRED JOHNSON | | Liverpool. |
| Mr. J. G. JACKSON | | Sheffield. |
| Mr. T. M. LEWIS | | Narbeth. |
| Mr. R. E. LLOYD | | Garston. |
| Mr. J. PENNINGTON | | Wigan. |

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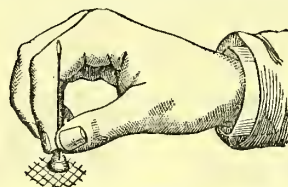
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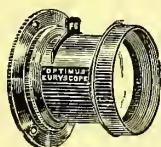
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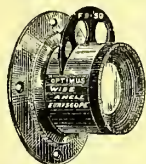
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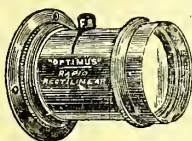
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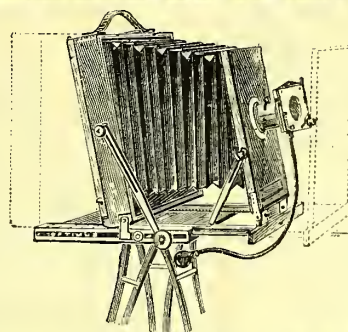
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| $4\frac{1}{4} \times 3\frac{1}{2}$ | 5 × 4 | $6\frac{1}{2} \times 4\frac{1}{2}$ | $8\frac{1}{2} \times 6\frac{1}{2}$ | 10 × 8 | 12 × 10 | 15 × 12 |
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Dental instruments for sale; 2 keys, 11 pairs forceps (4 pairs new, white metal), 2 lancets-1 punch. Address, J. M., 8 Wilson Street Gray's Inn Road.

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Second-hand wall-fittings.—Drawers; 9 cylindrical carboys, cut stoppers; counter with glass fronts, 6 ft. and 12 ft.; dispensing-screen, 6 ft.; and a variety of utensils and shop-rounds, being the entire fittings of a West end shop; 60s. the lot, or separated in proportion. Natali, 40 Gray's Inn Road, London.

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Two 2-gallon swan-neck carboys, cheap. Price, &c., Scholey, Burnham Market.

B. & W.'s "Enterprise" tincture-press; large size; cheap. Harrison, Chemist, Ashwell, Herts. Price-lists wanted by J. Cameron, 22 William Street, Merthyr, who is about to open a medical herbalist's business.

Adjustable operating-chair, also office-lathe, in good condition. Particulars as to price, &c., "Dentist," c/o Huxley, 176 Cemetery Road, Sheffield.

Chemist and Druggist, Feb. 13, '92. 61/50, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Second-hand chemical balance in working order (gramme weights preferred). Send price and particulars to 56/42, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Address Wanted.

Address wanted of George Brass Moore, Chemist, formerly of Cheadle, Staffordshire, and Southport. Address, 230/9, Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

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TRANSFER AGENCY NOW OPEN.
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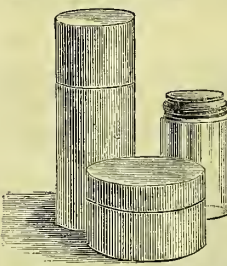
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In Stock, upwards of 50,000,000
TURNED WOOD BOXES,
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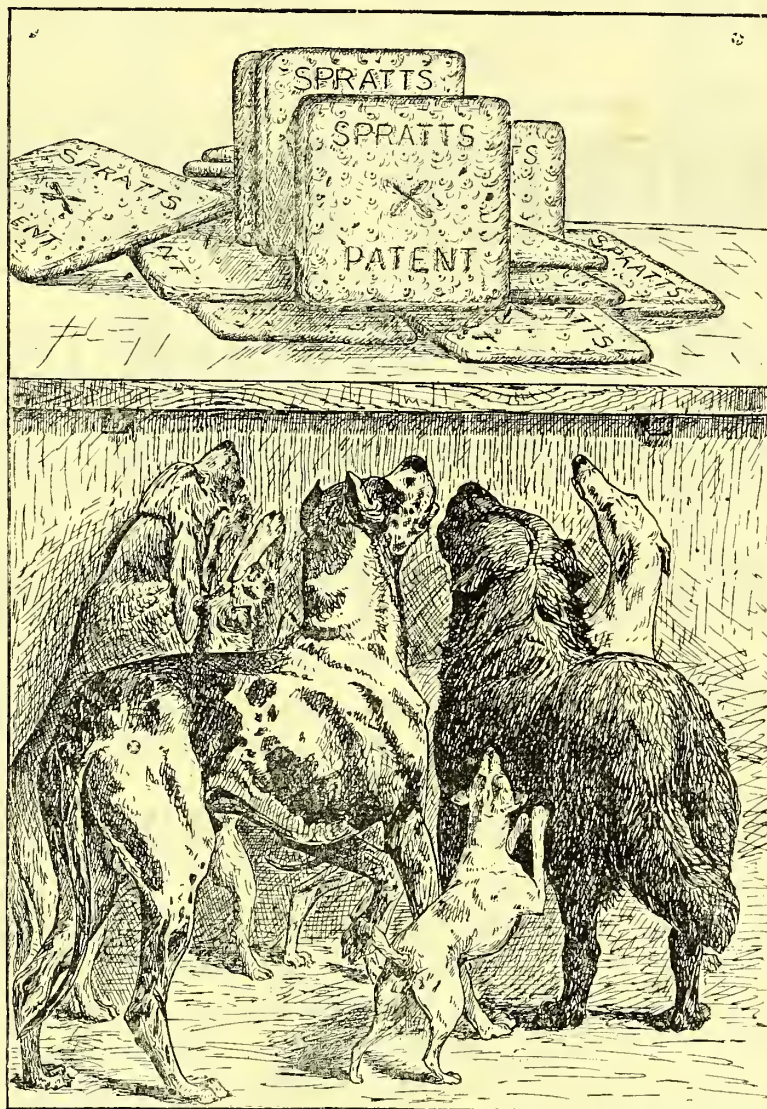
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Recognised and read throughout the civilised world as the organ of the
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THE CHEMIST & DRUGGIST

**THE ANNUAL SUMMER ISSUE,
JULY 29, 1893,**

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Supplements. No similar opportunity of **effectively and economically** distributing
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Circulars for insertion in "The Chemist and Druggist" must be on pages similar in size to those of that Journal, but may be of any tint; they must be folded singly (or otherwise folding will be charged for). Each page must bear the head-line: "Supplement to the Chemist and Druggist, July 29, 1893" and the Circulars must be delivered to us not later than Monday, July 24

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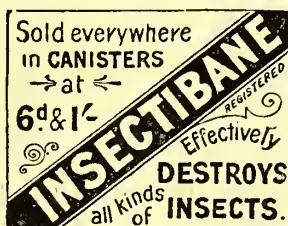
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We desire to point out the special advantages which the sale of our "Acme" Weed Killer affords the Trade.

1. The "Acme" Weed Killer is used in the gardens and on the estates of the Gentry everywhere, and by Corporations and Burial Boards in Parks, Cemeteries, &c.

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THE "ACME" WEED KILLER, FOR CHEAPNESS AND EFFICIENCY, HAS WON FOR ITSELF A NAME FAR ABOVE ALL OTHERS.

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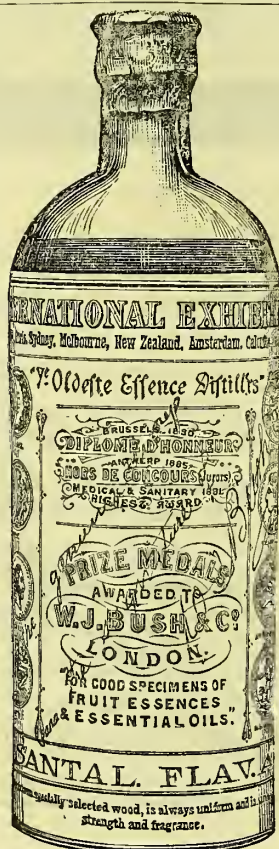
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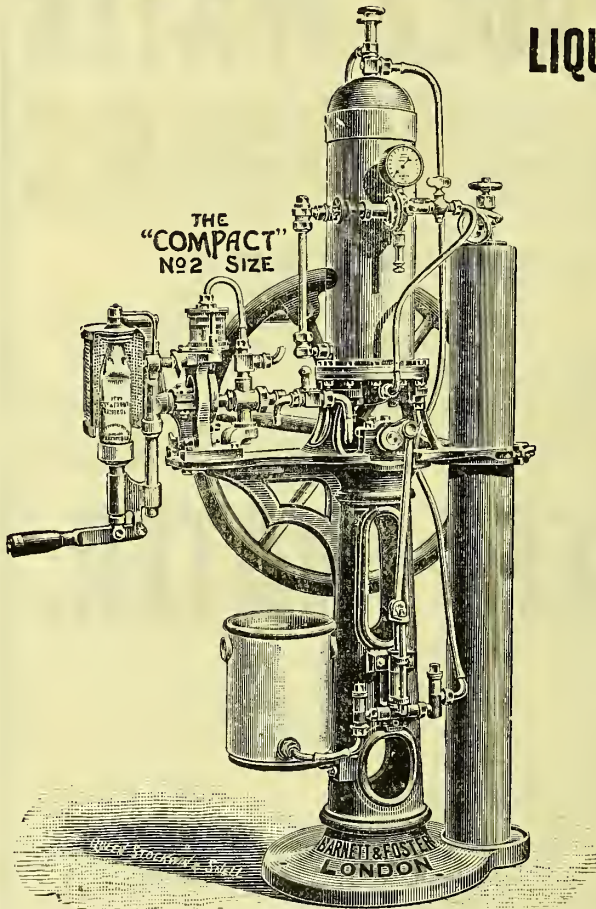
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WITH LIQUEFIED CARBONIC ACID GAS.



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"COMPACT"
No 2 SIZE

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I am more than satisfied with the "Compact" Machine, which answers my utmost requirements. I have nearly trebled my sale this last three weeks.

I find the waters produced by this Machine far better than I have been able to obtain from any one, being much more saturated with the gas, and the Siphons emptying themselves straight off, without shaking.

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December 16, 1892.

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I would also add that beyond the renewal of a few washers, no repairs of any kind have been required since I had it, some fifteen months since.

THE No. 2 "COMPACT" Machine (AS SHOWN).

Producing capacity, by hand, 35 dozen per hour.

PRICE £48.

Or, if fitted for steam, 70 dozen per hour (with an extra filling machine).

NOTE—Any kind of filling machine can be attached to the "Compact" Machines, EITHER for Siphons, Internal Stopped, Cork, or Screw Bottles.

Iron Vessel containing an average of } 10s.
28 lbs. by weight of Liquefied Gas } each.

And has sufficient Gas to manufacture about 18 gross of highly-charged Soda Water (10-oz. Bottles), or double this quantity of splits.

These Machines occupy little space, and are ready for use immediately! They require no fixing! Are self-contained and produce soda water, lemonade, &c. of the highest class and greatest purity, at a minimum of cost.



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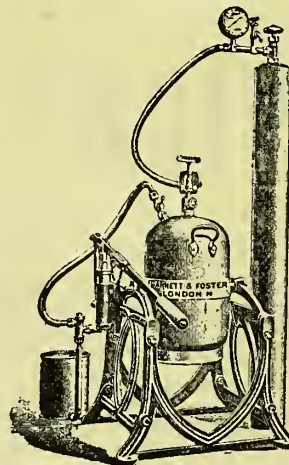
It is the Cheapest, Strongest, Hand-somest, and Best in the World.

Pure Block Tin Tops.

PRICE 1/6 EACH.

Nickel-plating Tops from 3d. each.
Silver-plating Tops from 4½d. each.
Marking on Tops Free for orders of 250. Marking on Vases Free for orders of 1,000.

THE PORTABLE CYLINDER



As here shown, is charged with plain filtered water while on the Rocker; the gas from the vessel is then slowly turned on, and the copper cylinder rocked backwards and forwards sharply so as to agitate or mix the water and gas together. When charged to the required pressure (about 110 lbs., shown by the pressure-gauge), it can be removed and attached to the Counter Fountain, or for a filling machine if desired.

Prices.

| | £ | s. | d. |
|--|---|----|----|
| Six-gallon Tinned Copper Cylinder | 5 | 10 | 0 |
| Cast-iron Rocker | 1 | 2 | 0 |
| Flexible Pipe, Pressure-gauge, Safety-valve, & Connections | 3 | 3 | 0 |
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UNSURPASSED
QUALITY

BY ANY FOR
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TELEGRAPHIC ADDRESSES:

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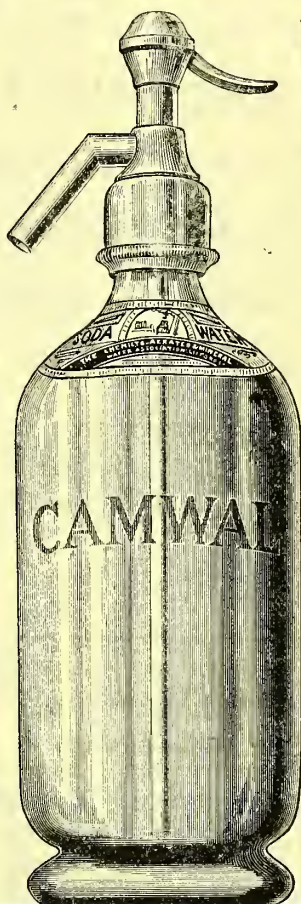
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| Year | No. of Members | Dividend |
|------|----------------|-----------------|
| 1878 | 119 | None |
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| 1880 | 430 | None |
| 1881 | 540 | None |
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| 1883 | 708 | 5 |
| 1884 | 908 | 6 |
| 1885 | 1,193 | 6 |

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| 1887 | 1,612 | 7 $\frac{1}{2}$ |
| 1888 | 1,892 | 5 |
| 1889 | 2,031 | 7 $\frac{1}{2}$ |
| 1890 | 2,088 | 8 $\frac{1}{2}$ |
| 1891 | 2,134 | 10 |
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Trade Lists, sample Counter Bills, and Analytical Reports will
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ANCOATS 146 MINORIES
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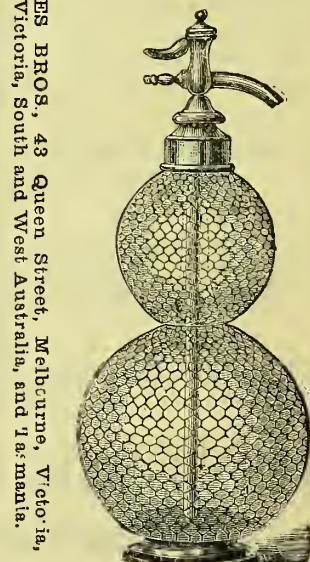
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Including two funnels and stopper for charging.
The tops of these Seltzogenes are made of pure block tin, guaranteed.

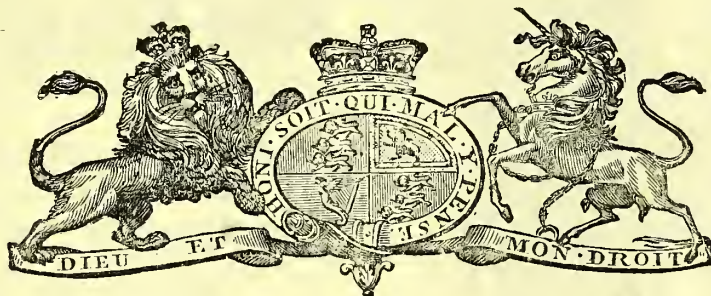
All our Seltzogenes are
manufactured on the well-
known "Fevre" System,
and each one is thoroughly
tested before leaving the
works.



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Purveyors
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- IDRIS SODA WATER.** Brilliant, Pungent, and Sparkling.
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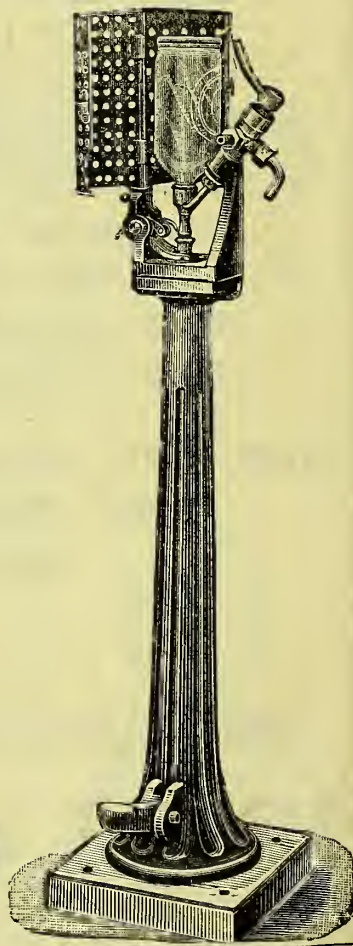
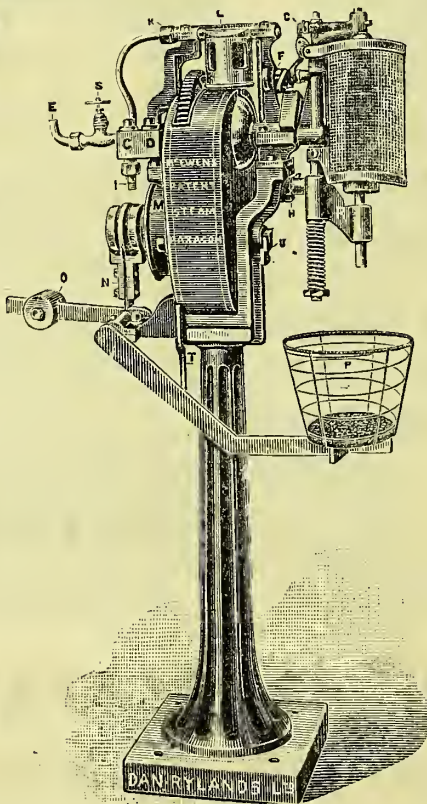
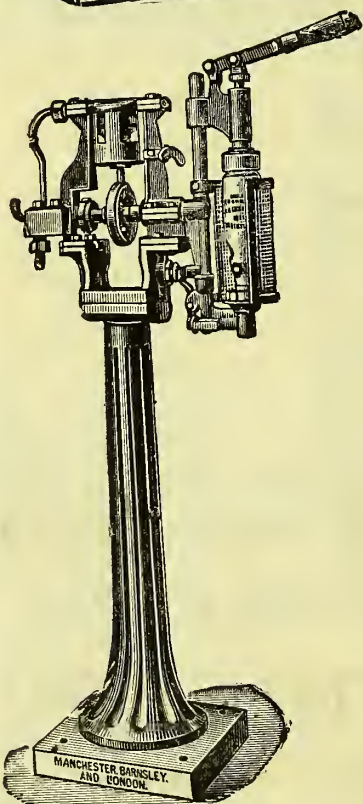
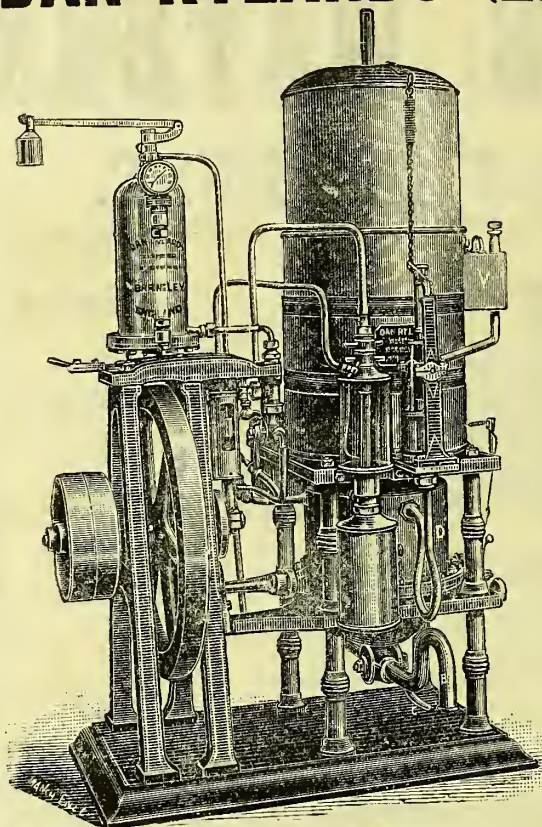
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HAND OR POWER

SODA-WATER PLANTS

(ALL SIZES).

**HAND AND STEAM FILLERS
FOR CORKS AND PATENTS.****SYPHON FILLERS,
SYPHONS,
BOTTLES, BOXES, AND ALL SUNDRIES
FOR THE TRADE.***Send for
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CONCENTRATED SOLUBLE FRUIT

ESSENCES

ARE NOTED

For the Excellent Flavour and Aroma they impart to the beverages prepared with them.

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Sol. Ess. Lemon, double the usual strength.
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 Foamine, double strength.

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We are the makers of what is undoubtedly the very best Steam Filler for Codd's bottles, and it is in constant use by many of the best makers in the country. It is fitted with a perfect Syrup and Water Saving Motion, and we guarantee it to fill perfectly 80 to 100 dozen large bottles per hour with one lad only.

Price £26 net cash, or with Improved Syrup Indicator, 30s. extra.

OVER 100 OF THESE MACHINES ARE IN ACTUAL WORK.

W. MEADOWCROFT & SON,

FRUIT ESSENCE MANUFACTURERS AND AERATED WATER ENGINEERS,

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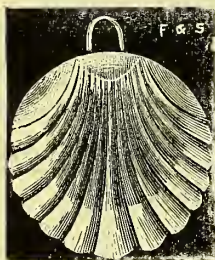
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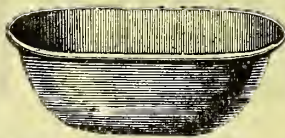
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'UNBREAKABLE' TUBS.

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Enamelled white inside, marbled outside.
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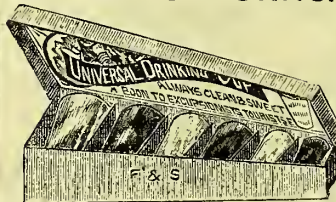
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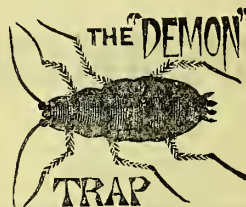


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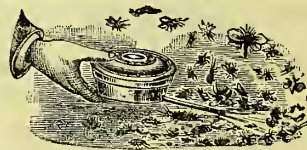
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perforated to tear out.
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Fuerst Bros.
Lorenz, H.
Morris & Callard (Salts)

ACIDS

Boulton, J., & Co., Lim.

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Barnett & Foster
Burroughs, Wellcome & Co.
Chemists' Aerated Waters Association, (Lim.)
Ellis & Son (Athens)
Franz, J. serf
Idris & Co., Lim.
Ingram & Royie
Jewsbury & Brown
Johannis Co.
Kilmord & Co.
Levico Water
Mills & Co. (Bourne)
Rosbach Water Co.

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(See SYPHONS and ESSENCES.)

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Bratby & Hinchliffe, Lim.
Queret Freres
Meadowcroft & Son
Rylands, Dan, Lim.
Tyler, Hayward, & Co.

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Kempthorne, Prosser & Co.
Lemon, B. G., & Co. (N.Z.)
Peake, Allen & Co.
Prosser, Taylor & Co.
Soul, W. H., & Co.

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Smith, T. & H., & Co.

AMMONIA

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White, A., & Sons
Woodley, Sons & Co.

APPARATUS

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Berend, O., & Co.
Christy, T., & Co.
Hicks, J. J., | Ohlson, A.
Orme, J., & Co. (Scientific)
Perken, Son & Rayment
Potts, H., & Co.

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Goodall, Backhouse & Co.

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Robinson & Sons
Schutze, F., & Co.

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Chemists' Association, Lim.
Maw, S., Son & Thompson
Pattison, G., | Solport Bros.

BICARB. SODA

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Howards & Sons
May & Baker, Lim.

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Hewlett & Sons
Howards & Sons
May & Baker, Lim.
Symes & Co., | Tyler, T., & Co.
White, Alfred, & Sons

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Hargreaves, Dr., M.D.

BORAX

Howards & Sons
Mack's Starch

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Aire & Calder Bottle Co., Lim.
Barnett & Foster
Barrett, R. H.
Bratby & Hinchliffe, Lim.
Evans, Sons & Co.
Gilbertson, H., & Sons
Hearn, E. A., & Co.
Isaacs & Co.
Johnsen & Jørgensen
Kilner Bros.
Potts, H., & Co.
Rylands, Dan, Lim.
Toogood, W.
W. P. Brand Bottles
Youldon, E.

BOXES

Austin & Co. (Cardboard)
Ayrton & Saunders
Crowden & Garrod
Evans, Sons & Co.
Kent, G. B., & Sons
Kilner Bros., | Maxime & Co.
Robinson & Sons
Rylands, Dan, Lim.

BRUSHES

Crowden & Garrod
Evans, Sons & Co.
Kent, G. B., & Sons

BUNSEN BURNERS

Berend & Co.

BUTTER COLR. &c.

Bonilton, J., & Co., Lim.
Crawshaw & Co.
Hartick & Co., Lim.

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Riesdachs & Co.
Blyton, Astley & Co.
Jackson, Thos., | Pascall, J.
Warrick Brothers

CAMPHOR

Fuerst Bros.
Howards & Sons
May & Baker, Lim.
Morrison, J., & Co. (Comprsd)

CAPSULES

Denoual, J. (Medicinal)
Duncan, Flockhart & Co.
Evans, Sons & Co.
Hartick & Co., Lim.
Hooper, B., & Co.
Lofthouse & Saltmer
Richardson, John, & Co. (Leicester), Lim.
Warrick Brothers
Wyeys, Lim.

CARBOLIC ACID

Calvert, F. C., & Co.
Wandsworth Chemical Works, Lim.

CSERA SAGRADA

Anderson & Sons
Duncan, Flockhart & Co.
Evans, Sons & Co.
Ferris & Co.
Moss, J., & Co.

CASTOR OIL

Allen & Hanbury
Christy & Co. (Aromaticum)
Fuerst Bros.

CATALOGUES

Newbery, F., & Sons
Maw, S., Son & Thompson
May, Roberts & Co.
Santer & Sons

CERESINE WAX

Boehm, Fredk.

CHECK TILLS

National Cash Till Co.
Patent Voucher Check Till Co., Lim.
Stokes, G. R., & Co., Lim.

CHEST PROTCTRS

Chemists' Association, Lim.
Hockin, Wilson & Co.
Liverpool Patent Lint Co.
Newbery, F., & Sons
Pattison, G., | Solport Bros.

CHEMICALS

Boehm, Fredk.
Boehringer, C. F., & Schne
Boulton, J., & Co., Lim.
Bramwell, E., & Son
Brunner, Mond & Co., Lim.
Fletcher, Fletcher & Stevenson
Fuerst Bros.
Goodall, Backhouse & Co.
Hill, A. S., & Son (Clarke)
Hodgkinsons, Treacher & Howards & Sons (Pharm.)
Levermore, Aug., & Co.
Lofthouse & Saltmer
Lorenz, H.
May & Baker, Lim.
Morris & Callard | Moss & Co.
Smith, T. & H., & Co.
Tyler, T., & Co.
Washington Chemical Co.
White, A., & Sons
Zimmermann, A. & M.

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Government Sanitary Co.
National Chemical Co.

CHLORODYNE

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Davenport (Browne's)
Towle, A. P., & Son

CHLOROFORM, &c.

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Smith, T. & H., & Co.
Wright, Layman & Umney
Zimmermann, A. & M.

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Rowntree & Co.

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Fench Hygienic Soc.

Stephen Smith & Co. (Hall's)

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Allen & Hanburys

Blensdale & Co.

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Evans, Sons & Co.

Hill, A. S. & Son

Hockin, Wilson & Co.

Robinson & Co.

Smith, T. & H. & Co.

Woolley, Sons & Co.

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Symington, T., & Co. (Coffee

Essence)

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Blyton, Astley & Co.

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Solport Bros.

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Haynes, G., & Co. (Absorbent)

Robinson & Sons (Absorbent)

Sanger, J., & So s

CRSHD LINSEED

Mumford, S. G.

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Bronnley, H., & Co.

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Quelch, H. C.

Roberts & Co.

Stevens, P. A.

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Thompson & Capper

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Drysdale, J. W., & Co.

Dussek Bros. & Co.

Eureka Manufacturing Co.

Fletcher Bros. & Co.

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Grindley & Co., Lim.

Jeyes' Sanitary Compounds Co.

Mackey, Mackey & Co.

Mason, C. E., & Co.

May & Baker, Lim.

National Chemical Co.

Sanitas Co.

Seahury & Johnson

Tyrer, T., & Co. (Lim.)

Wandsworth Chemical Works.

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Chemists' Association, Lim.

Chemists' Mineral Water

Association, Lim.

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Hockin, Wilson & Co.

Laird & Co., Lim.

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Sanger & Sons

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Schintze & Co.

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Warne & Co.

Wood, Vincent | Young, J.

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DYES, &c.

Ayrton & Saunders

Burton, W., & Sons

Crawshaw & Co.

Hatrik & Co., Lim.

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Farina, J. M.

Hockin, Wilson & Co. (Farina)

Martin, Maria (Nun)

Moehlich, Oscar, & Co.

Muhlen, F.

ELECTRIC APPAR.

Darton, F., & Co.

Gent & Co. | Orme & Co.

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ENEMAS

Burelays, Lim.

Evans, Sons & Co.

Sanger & Son

ENGRAVERS

Coursau, J. R.

ESSENCES

Boehm, Fredk.

Boulton, J., & Co. (Lim.)

Brathy & Hinchliffe, Lim.

Burgoyne, Burhidges & Co.

Bush, W. J., & Co.

Fletcher, Fletcher & Stevenson

Goodall, Backhouse & Co.

Ildis & Co., Lim.

May & Baker, Lim.

Meadowcroft & Son

Newhall & Mason

Rylands, Dan, Lim.

Stevenson & Howell

Tyrer, P. (Anchovies)

Tyrer, T., & Co.

Woolley, Sons & Co.

ESSENTIAL OILS

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Barrett, A. A.

Boehm, Fredk.

Bush, W. J., & Co.

Clay, Dod & Co.

Cocking & Co. (Japan Pepper-

Dodge & Olcott (mint)

Dore, J. H. L.

Evans, Sons & Co.

Hockin, Sons, Treacher &

Clarke

May & Baker, Lim.

Meadowcroft & Sons

Sozio & Andrioli

Stevenson & Howell

Symes & Co.

Treatt, R. C.

Vogt, G., & Co.

Warrick Bros.

Witrofsky, E.

Wright, Layman & Umney

ETHER

Duncan, Flockhart & Co.

Howards & Sons

May & Baker, Lim.

Robbins, J., & Co.

Tyrer, T., & Co.

White, A., & Sons

Woolley, Sons & Co.

Wright, Layman & Umney

EUCALYPTUS

Rickfords, J., Bosisto's

Drysdale, J. W., & Co.

Evans, Leacher & Webb

Fletcher, Fletcher & Stevenson

Grimwade, Ridley & Co.

Langham, Mackay & Baker

Murdoch, J., & Co.

Tasmanian Eucalyptus Oil Co.

Vogt, G., & Co.

Woods & Co.

EXALGINE

Kuhn, B.

EXTRACT MEAT

Brand & Co.

Bush's Liquid Reef

Ildis & Co. (Viking Co.)

Liebig Co.

Liquor Carnis Co., Lim.

Mason, G., & Co., Lim.

Wyeth, J., & Brother

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Evans, Sons & Co.

Fletcher, Fletcher & Stevenson

Hearon, Squire & Francis

Hooper, B., & Co.

Lloyd, T. Howard, & Co.

Mason, G., & Co., Lim.

Potter & Clarke

Vogt, G., & Co.

Wright, Layman & Umney

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(Thermo Safe)

Chemists' Association, Lim.

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Hearn, E. A., & Co.

Hockin, Wilson & Co.

Kilner Bros., | Lynch & Co.

Marriott, E., & Co.

May, Roberts & Co.

Maw, S., Son & Thompson

Spence & Co.

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Fordham, W. B., & Sons, Lim.

Mawson Filter Co.

Silicated Carbon Filter Co.

FLY PAPERS

Ford, Shapland & Co.

Tunbridge & Wright

FOOD (Infants' & Invalid's)

Allen & Hanburys

Henger's Food

Brand & Co.

Chibnall, H. B.

Evans, Sons & Co.

Frame Food Co., Lim.

Goodall, Backhouse & Co.

Hearon, Squire & Francis

Ildis & Co., Lim.

Liebig Co.

Liquor Carnis Co., Lim.

Mason, G., & Co., Lim.

Nestle, H.

Ridge, Dr.

Wyeth, J., & Bro.

FORMULA

Brooks, T.

GINGER ALE

Mills, R. M., & Co.

GLYCERINE

Blyton, Astley & Co. (Pastilles)

Boehm, F. | Fink & Co.

Fuerst Bros.

Greiff, R. W., & Co.

Hearon, Squire & Francis

Lloyd, T. Howard, & Co.

Wright, Layman & Umney

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Fink & Co. (Arabic, &c.)

Levermore, Aug., & Co.

HAIR PREP.

Anglo-American Drug Co.,

Lim.

Cheshrough Co.

Fidels & Co.

Tinefit, H. P., Lim.

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Newball & Mason

Potter & Clarke

HERB BEER EXTS

Newball & Masou

Potter & Clarke

HOMEOPATHIC

Epps & Co.

Keene & Ashwell

Leath & Ross

Thompson & Capper

Watson & Wates

HYPOPHOSPHITES

Duncan, Flockhart & Co.

Fellows

Fletcher, Fletcher & Co.

Symes & Co.

Tyrer, T., & Co.

INDIARUB. GOODS

Ter Rubber Co.

Warne, W., & Co.

INHALERS

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Hockin, Wilson & Co.

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Dose, 1 to 4.

Per 1,000,
in Plain Bottle,
4/-.
Per Small Stopped
Vase with painted
glass label,
5/6.

Per Stopped Vase,
with painted glass
label. (1,000.)
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R. Podophyllin, $\frac{1}{2}$ gr.; Ext. Colecyth, $\frac{1}{2}$ gr.;
Pv. Soc. Aloes, 1 gr.; Pv. Scammony, $\frac{1}{2}$ gr.;
Pv. Saponis, 1-8 gr.; Ext. Hyoscyami, 1-8 gr.;
Gingerine, 1-8 gr. Dose, 2 to 4 pills as a
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Per 1,000,
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Per Stopped Vase,
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Per Stopped Vase,
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label,
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COPPERFIELD ROAD,
LONDON, E.****LARGEST MAKERS IN THE KINGDOM.****We are prepared to supply METHYLATED SPIRIT in
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S.V.R. and Methylated Spirit at lowest present prices****CALE ST. DISTILLERY***All at Lowest Prices and
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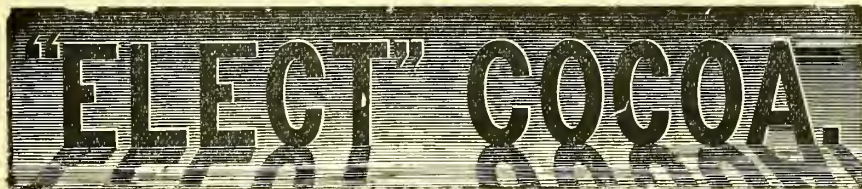
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In Brass Boxes only,
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These Cachoux are delicately flavoured

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They look well,
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A NOVEL CONFECTION.

Delicious Flavour. Brilliant and Attractive Appearance.

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and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

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On $\frac{1}{4}$ -gross cards at 5/3

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In 1-dozen parcels at 6/3

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 $\frac{1}{4}$ -gross glass-front boxes at 6/6

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In 1 dozen parcels at 4/3

*GOLDEN PETROLEUM JELLY

Per doz.

4-oz. glass, metal screw cap 3/

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This is warranted pure, and is a thoroughly good line.

*PENNY HAIR OIL

Per gross

In 1-dozen parcels at 5/9

PENNY FURNITURE CREAM

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In perforated tins at 4/6

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On $\frac{1}{4}$ -gross cards 5/9 and 6/6

*PENNY (*Tasteless*) PILLS

6 in a box, $\frac{1}{4}$ -gross cards 4/6

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*PENNY SOOTHERS

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*PENNY TOOTH TINCT.

With Wool complete, $\frac{1}{4}$ -gross cards 5/6

"I appeal to every sensible person."

SAUCES.

See Special Price List.

*PENNY CORN SOLVENT

Per gross

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PENNY CAMPHOR SQUARES

 $\frac{1}{4}$ -gross boxes 7/

*FULLER'S EARTH POWDER

1d. Boxes, in $\frac{1}{4}$ -gross glass-top boxes 3/6

*VIOLET POWDER

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1d. Packets, on $\frac{1}{4}$ -gross cards 3/6

*COURT PLASTER

1d. Packets, on $\frac{1}{4}$ -gross cards (Black, White, or Pink) 4/

*TOOTH ENAMEL

(Gutta Percha Enamel for Stopping Decayed Teeth.)

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For sums under £1 please remit Postal Order, not Cheque, and oblige,

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38

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CONTAINS THE ESSENTIAL ELEMENTS of the Animal Organisation—Potash and Lime;

THE OXIDISING AGENTS—Iron and Manganese;

THE TONICS—Quinine and Strychnine;

AND THE VITALISING CONSTITUENT—Phosphorus: the whole combined in the form of a Syrup with a **SLIGHTLY ALKALINE REACTION**.

IT DIFFERS IN ITS EFFECTS FROM ALL ANALOGOUS PREPARATIONS, and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

IT HAS GAINED A WIDE REPUTATION, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

ITS CURATIVE POWER is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

ITS ACTION IS PROMPT; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact also that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, **FINDS THAT NO TWO OF THEM ARE IDENTICAL**, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, **IN THE PROPERTY OF RETAINING THE STRYCHNINE IN SOLUTION**, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "**Syr. Hypophos. FELLOWS.**"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles (4/- or 7/-): the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

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A. B. C. SYSTEM.

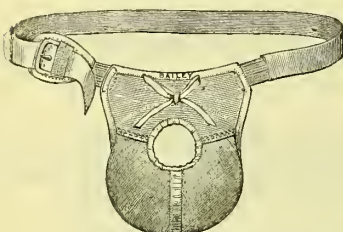


FIG. 1.

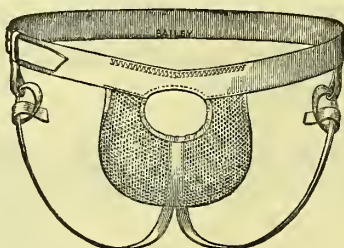


FIG. 2.

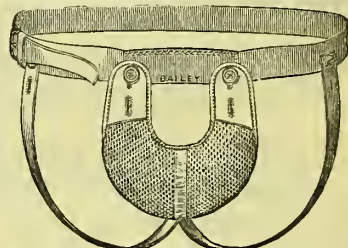


FIG. 3.

Cabinet of 2 dozen assorted, **30/-** USUAL DISCOUNT.

TESTIMONIAL.

GENTLEMEN,—Please repeat our last order for "Suspensory Bandages." We think your idea of arranging the sizes and qualities by the use of numbers and letters a very excellent one, as it is most convenient to the Chemist in ordering, and we find our customers make use of your method. It brings us many repeat orders.

Yours faithfully,

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TELEGRAPHIC ADDRESS—"BAYLEAF LONDON."

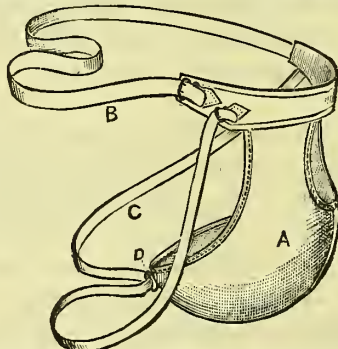
THE **SUSPENSORY BANDAGE** TO RECOMMEND IS THE **"SYRACUSE,"** With Self-Adjusting Loop at Back of Pouch. (PATENTED IN ENGLAND.)

**HAS THE LARGEST SALE
OF ANY SUSPENSORY BANDAGE
IN THE STATES.**

3 SIZES—Large, Medium, and Small.

Made in Seven Qualities, to suit all
Markets.

Each Bandage is carded separately, with
Printed Guarantee.



Each Bandage bears a Guarantee
to give satisfaction to wearer, or
money returned at our expense.

COTTON POUCHES.

| | | |
|---------|-----|--------------|
| Nos. 10 | 16 | 21 |
| 6/6 | 12/ | 18/ per doz. |

SILK POUCHES.

| | | | |
|---------|-----|-----|--------------|
| Nos. 26 | 31 | 34 | 36 |
| 24/ | 30/ | 48/ | 72/ per doz. |

We call attention to the fact that our Bandages are advertised in all the leading Athletic papers, and are largely used by Athletes of all kinds. We would strongly recommend all Chemists who require a first-rate Bandage, and who wish to give satisfaction to their Customers, to hold stock, which will enable them to supply our Bandages when asked for.

May be obtained from all leading Druggists' Sundries Houses throughout the Country, or from the

WELLS MANUFACTURING CO. (H. C. Quelch), LUDGATE SQUARE, LONDON, E.C.

DIGESTION.

THE DIGESTIVE FERMENTS.—Diastase is an unorganised ferment; inasmuch that it is known to contain Nitrogen, it is doubtful if it has been obtained pure.

THE KEPLER MALT EXTRACT is especially rich in this ferment.

KEPLER MALT EXTRACT contains all the nutrient elements of pure barley, such as phosphates, albuminoids, &c., in conjunction with that peculiarly active substance, *diastase*, which is concerned in converting the starch of farinaceous products into the more assimilable products. This diastase is a most important principle of the Malt, being of special service in errors of nutrition, accompanied by digestive derangements. It does not tax digestion, but aids it in its processes, and furnishes warmth-giving, tissue-forming, and force-producing elements.

With reference to the Kepler Extract of Malt, there is, no doubt, a big future before this preparation as a vehicle for taking nauseous medicines. The ARCHIVES OF PEDIATRICS, for December, 1890, maintain with regard to the Kepler Solution of Cod-Liver Oil with Extract of Malt, "that the disagreeable taste of Cod-Liver Oil may be made to disappear by mixing the Oil with Extract of Malt which has been prepared in vacuo." They also affirm that the Kepler Extract of Malt placed in contact with Cod-Liver Oil dissolves it. This solution (Kepler) is perfectly clear and transparent, and shows no fat-globules under the microscope. In this manner, strange as it may seem, a true solution is produced. To separate the Oil it is only necessary to place a drop of water on the surface, when immediately small globules of oil appear. This emulsion is more perfect than that of butter in milk. Invalids, and especially children, enjoy the solution, and, far from disturbing digestion, as the raw Oil too often does, the Malt improves it.

Steapsin emulsifies fat in the presence of bile, so that the whole of the emulsified fat is absorbed by the lacteals of the intestines during its passage through the alimentary canal. The remaining Enzyme of the Pancreatin acts upon proteids in exactly the same manner as Pepsin, the Pancreatic ferment being active only in an alkaline medium, while the Pepsin acts only in an acid medium. Probably the Fairchild Zymine was the first pure production of the Pancreatic Enzymes. Zymine is free from any admixture with starch, milk-sugar, or other diluent material, and it is especially active in digesting carbo-hydrates and proteids. Zymine (Fairchild) is supplied as powder in quarter-ounce and one-ounce bottles, each bottle being fitted with a depression in the cork to hold sufficient of the powder to digest a pint of milk or beef-tea, according to the directions given on each label. The Zymine Peptonising Powders each contain 5 grains of Zymine with 15 grains of Bicarbonate of Soda in small glass corked tubes, each tube containing sufficient of the Zymine and alkali to digest a pint of milk or beef-tea. These are very convenient for use in the sick-room, as they undoubtedly obviate the necessity for calculating the quantity to be used. With each packet of powders a little brochure is supplied, containing directions for the preparation of various kinds of food suitable for invalids and infants. The Zymine is also supplied in the form of "Tabloids," each "Tabloid" containing 3 grains of Zymine. Also in compound Zymine "Tabloids," each containing 2 grains of Zymine, Subnitrate of Bismuth 3 grains, Ipecacuanha $\frac{1}{10}$ gr. These are sugar-coated, and are very easily swallowed with a draught of water. Zymine is employed with benefit in the treatment of intestinal dyspepsia, indicated by pain and depression in the lower part of the stomach about 2 hours after taking food. Chemists will find that a large demand for these goods can be created entirely as a separate line in their business.

Zymine is supplied to the trade in $\frac{1}{4}$ -oz. and 1-oz. bottles at 20s. and 60s. per dozen bottles. Zymine "Tabloids" and Zymine Co. "Tabloids," in bottles of 25 and 100, at 18s. and 48s. per dozen bottles. Zymine Peptonising Powders, in boxes containing 12 tubes, at 14s. per dozen boxes. Kepler Extract of Malt and Kepler Solution, in $\frac{3}{4}$ -lb. and 1 $\frac{1}{2}$ -lb. bottles, at 20s. and 36s. per dozen.

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Three Styles

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|---------------------------------------|--------|--------------------|
| PERFUMED. Boxes of 3 doz. Tablets ... | } 24/- | Per gross Tablets. |
| UNSCENTED. Ditto ditto ... | | Assorted |
| TAR. Card boxes of 6 Tablets ... | | if preferred. |

CHEAPER, BETTER, AND MORE PROFITABLE THAN ANY SOAPS IN THE WORLD.

CHESEBROUGH MANUFACTURING CO., 42 HOLBORN VIADUCT, LONDON, E.C.
Sole Proprietors and Makers of "VASELINE."

VOICE "TABLOIDS,"

Composed of COCAINE, Chlorate of Potash, and Borax.

Impart a clear and silvery tone to the voice, are easily retained in the mouth while singing or speaking, and are now used by the leading singers and public speakers throughout the world.

DIRECTIONS.—A single "Tabloid" may be slowly dissolved in the mouth to remove huskiness or hoarseness.

Supplied to the Trade in beautifully graven white metal boxes, blue silk labels, 30 and 80 in each, 8s. and 16s. per dozen. Vinaigrette bottles, 30 in each, 8s. 6d. per dozen.



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BEST BLACK INK KNOWN.

DRAPER'S INK (DICHROIC).

When this Ink is used writing becomes a pleasure
May be had from all Chemists and Druggists and Stationers.

Can be obtained in London through Messrs. Barclay & Sons, Farringdon Street; W. Edwards & Son, 157 Queen Victoria Street, E.C.; F. Newbery & Son, Newgate Street; S. Maw, Son & Thompson, Aldersgate Street; Ayrton & Saunders, Duke Street, Liverpool; Goodall, Backhouse & Co., Leeds; John Heywood, Deansgate Street, Manchester; James Hemington, 6 Moor Street, Birmingham; Henry Hodder, Broad Street, Bristol.

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See "Chemist and Druggist," December 15th, 1894.

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For Infants, Children, and Invalids.

GOLD MEDAL AWARDED—HEALTH EXHIBITION, LONDON.

HIGHEST AWARD—ADELAIDE, 1887, and MELBOURNE, 1888.

The Lancet describes it as "Mr. Benger's admirable preparation."

The London Medical Record says: "It is retained when all other foods are rejected. It is invaluable."

The British Medical Journal says: "Benger's Food has by its excellence established a reputation of its own."

The Illustrated Medical News says: "Infants do remarkably well on it. There is certainly a great future before it."

Benger's Food is sold in Tins at 1/6, 2/6, 5/, & 10/, by Chemists, &c., Everywhere.

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AS AN OFFICIAL JOURNAL

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—PHARMACEUTICAL SOCIETY OF IRELAND, SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION, MIDLAND PHARMACEUTICAL ASSOCIATION OF NEW ZEALAND, CENTRAL ASSOCIATION OF NEW ZEALAND, OTAGO PHARMACEUTICAL ASSOCIATION, PHARMACEUTICAL SOCIETY OF QUEENSLAND, PHARMACEUTICAL SOCIETY OF SOUTH AUSTRALIA, PHARMACEUTICAL SOCIETY OF WESTERN AUSTRALIA, and TASMANIAN PHARMACEUTICAL SOCIETY.

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OUR SUMMER ISSUE.

WHOLESALE and manufacturing firms who may wish to bring themselves and their products before the best constituency of chemists and druggists at home and in the colonies are requested to note the opportunity which will be provided in our Summer Issue on July 29. For insertion in that issue we are prepared to receive specially printed insets the same size as THE CHEMIST AND DRUGGIST pages, and we shall distribute the issue to 11,000 of the best houses and buyers in the English-speaking drug trade. Specially printed circulars form a most effective and profitable means of advertising, and many of the leading houses in Europe and America have in the past used THE CHEMIST AND DRUGGIST as an economical channel of distributing matter to the trade at large. The publishers will be glad to furnish particulars to any who wish further information regarding the Summer Issue.

A NEW LILAC-COLOUR has been obtained by a member of the Franklin Institute from commercial extract of chestnut-wood. On oxidation of the extract in potash solution and neutralising with acetic acid, by the addition of potash alum a bright lilac was developed on both animal and vegetable fibre dipped in the solution. The nature of the body has yet to be ascertained.

Summary.

WE report this week the final meeting for the session of the Chemical Society.

AN interesting feature of the drug-sales this week has been the introduction of some cases of East Indian opium to the notice of London drug-buyers.

MR. NEWTON, the Marylebone Magistrate, having before him a man who described himself as a chemist, but was not on the register, has referred the matter to the Pharmaceutical Society.

THE suicide of a chemist at Pembroke Dock is recorded. The very sudden death of a chemist's assistant at Hertford has been inquired into, the inquest being adjourned in consequence of a curious piece of evidence.

WE announce this week the award of the special half-yearly prize in the Corner for Students. Mr. H. Bowden takes the first place, and Mr. J. H. Matthews and S. R. Powell are second and third, respectively.

FOR the benefit of agricultural and veterinary chemists, our travelling representative made a trip to the Royal Agricultural Society's Show at Chester this week, and reports on the exhibits of pharmaceutical interest to be seen there.

AT a school near Hertford a nurse administered carbolic acid instead of cough-mixture to a boy, death resulting. A doctor's child drank from a bottle of carbolic-acid solution and died. The Liverpool coroner is to see if he can do anything to check the sale of this poison.

THE organ of the veterinary surgeons published the report of the veterinary chemist case last week, with some comments which we reproduce, from which it appears that the idea is still held among them that they have a right to a monopoly in the adjective "veterinary."

OUR commissioner at the World's Fair, Chicago, gives in this issue a few notes of New York, Philadelphia, Washington, Pittsburgh, and Chicago experiences, looking at all these places from a pharmaceutical point of view. He also gives first impressions of the Exhibition, reserving more detailed reports.

OUR Irish correspondent states that the Dublin grocer who was recently fined for selling Kay's Essence, and who appealed to the Pharmaceutical Council for a reduction of the fine, has since given them notice that he intends to continue the sale of the article. It is supposed that the proprietors are backing him.

A VERY severe judgment was passed by Mr. Justice Wright in the case of *Alabone v. Morton*, which came before him last week. He refused—for the present, at all events—to allow the machinery of the Court to be used to prevent piracy of certain opinions of the Press and other testimonials in reference to a consumption-cure, in consequence of his suspicion that these were not altogether *bona-fide*.

Two notable cases under the Pharmacy Act, relating to the sale of proprietary medicines containing poisons, have been tried at Manchester, and are reported at length in our legal section. In one the Pharmaceutical Society prosecuted a druggist who had sold licorine which, it was said, contained morphia, but the judge dismissed this summons on the ground that the evidence for the plaintiffs did not show that a dangerous quantity was present, while that for the defendants indicated that the proportion was very minute. The other case was brought against two partners in the firm of Lewis's, at whose establishment chlorodyne had been sold. It appeared that one of the partners was a registered chemist, and the action against him was abandoned. The Judge reluctantly gave judgment against the other partner. In both cases notices of appeal were given.

THIOPHENDIODE is strongly recommended by Zuckerkandl as an efficient antiseptic possessing all the advantages of iodoform, without producing irritation of the skin. It has an aromatic odour, is non-poisonous, and has induced healthy granulations where iodoform had been but slightly successful.

English News.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

A Chemists' Tenancy.

At the Kidderminster County Court, before Sir R. Harington, J. B. Tomlinson, of that town, sued J. T. Griffin, chemist, for 6*l.* 17*s.*, damages alleged to have been done to plaintiff's premises by the defendant, and 2*l.* 2*s.* for leaving the premises in a filthy condition. Defendant had paid 6*l.* into court. Defendant occupied the premises as a chemist's shop, and when he left at Lady Day, as no terms could be arranged as to the fittings, the defendant removed these, and it was alleged that in having them removed he committed unnecessary damage to the property. After hearing several witnesses on both sides, the Judge said it was clear that the defendant acted out of spite in removing some of the fixtures, and gave a verdict for 7*l.* 9*s.*, including the amount paid into court.

Suicide of a Chemists' Shopfitter.

An inquest was held at Carmarthen on Friday on the body of William Chandler, aged 41, a chemists' shopfitter in the employ of Messrs. Bowling & Govier, of Gun Street, Bishopsgate, London. Deceased had for several weeks past been employed in fitting up a chemist's shop in Nott Square, Carmarthen, but latterly he had given way to drink, the result being that the contract to fit up the shop within a given time had been broken. This seems to have preyed upon his mind, and on Thursday morning, he was seen by a girl to jump from Carmarthen bridge into the River Towy. The tide was running out strongly at the time, and though a number of fishermen, in their coracles, immediately commenced netting the river, the body was not recovered till an hour afterwards. Deceased leaves a widow but no children. A verdict of temporary insanity was returned. After the verdict the Coroner gave 5*s.* to the fisherman who had found the body. This occasioned much murmuring among the fishermen in court, and one of them said the Coroner might pick up the body himself in future if anyone was drowned in the Towy. He was ordered out of court, but the Coroner having subsequently ascertained that he had power to give more, made the remuneration 1*l.* It was stated that the sum had to be divided between twenty-one coraclemen.

Brighton Chemists Dine.

Brighton chemists seem to be always dining, dancing, yachting, or in other way enjoying themselves. At all events, the reports of festivities in which they are engaged follow each other with curious frequency. We mention this fact to the credit of the Brighton pharmacists, and refer to them as an example to their prosperous brethren in other parts of the country.

The seventh annual dinner of the Brighton Chemists' Association was held at the Hotel Métropole, Brighton, on June 15. The new President, Mr. W. H. Gibson, F.C.S., occupied the chair, and Mr. Marshall Leigh, Honorary Secretary, and Mr. J. R. Gwatkin were vice-chairmen. The other gentlemen present were Dr. Whittle, Mr. I. Wilkinson, Mr. S. G. Gihson, Dr. Dinjon, Mr. H. Glanwiz, Mr. H. Gihson, Mr. H. Barton, Mr. Fox Goode, M.R.C.S., Mr. Histed, Dr. Pearce (Hurst), Mr. W. W. Savage, Mr. Antony, Mr. Colman, Councillor Costerton, Mr. J. Eherall, Mr. Fenner, Mr. A. W. Gihson, Mr. Guy, Mr. R. P. Heath, Mr. Hedgecock, Mr. Inman, Mr. Jago, Mr. Knight, Mr. Role, Mr. Riley, Dr. Snell, Mr. Shepherd, Mr. Smithson, Mr. Thorne, Mr. Upton, M.R.C.S., Mr. Williamson, Mr. Wallis, Mr. Wilson, and Mr. Yates. The dinner was an excellent one, well worthy of the reputation of the Métropole.

After dinner, the Chairman proposed "The Queen and Royal Family," and following him Mr. W. W. Savage proposed "The Pharmaceutical Society." His speech was quite as admonitory as it was complimentary, for references to former drowsiness were rather prominent in it. The speaker expressed the hope, however, that their days of slumber were nearly passed away, and that their action might be more vigilant, more to the

point, and more to the interest of chemists than it had hitherto been.

Mr. Marshall Leigh, in responding, referred to the fact that he had just been elected for the fifth year on the Council of the Pharmaceutical Society, and said it had always been a pleasure to him to associate with men like Mr. Carteighe, Mr. Cross, and Mr. Hampson, whom he met on the Council. He claimed that the Society was advancing and was always up to date. He especially advocated the work of the Benevolent Fund. The next toast was that of "The Brighton Association of Pharmacy," which was proposed by Mr. Fox Goode. In responding, the Chairman read a letter he had received from their old President (Mr. Savage), who wrote as follows:—

MR. PRESIDENT AND BROTHER PHARMACISTS,—I cannot allow the opportunity to pass without expressing my regret that I cannot be with you. This is denied me. I feel great pleasure in congratulating you, Sir, and your colleagues, and I have every reason to expect that the future of the Brighton Association of Pharmacy, with your able guidance, will be one of continued prosperity, and I trust that the new organisation will receive the general confidence of the whole trade. I can recall many pleasing events in my long career, and nothing more so than the great kindness of those it was my pleasure to meet. My warmest desire is that you may all be long spared to enjoy the festivities of your annual gathering, which must now cease to your old President.

(Applause.) Their Association, Mr. Gihson continued, was established twenty-one or twenty-two years ago. He thought its scope should be increased so as to include the chemists who lived in the villages and small towns round about. Then they wished the usefulness of their library extended, which would necessitate its being placed where it could always be accessible. For that purpose they should have to acquire a room or a small house or one of those pretty villa residences the Town Council were building on the Beach. (Laughter.) The annual outing, smoking-concerts, and an annual hall were all things that they desired to maintain. The Junior Association had been included in the toast, and for this Mr. Yates responded. It now, he said, numbered sixty-six, and was doing good work. The Chairman proposed "The Visitors," for whom Dr. Whittle replied. Messrs. Colman, Shepherd, Hedgecock, Fox Goode, Wallis, Roe, Eherall, and Dr. Whittle contributed songs or music in the course of the evening.

Two Bullocks in a Chemist's Shop.

Bullocks seem to be peculiarly fascinated by chemists' shops. Two of them marched into the shop of Messrs. Clarke, Nettleship & Bailey, Leicester, on Wednesday of last week. The animals were being driven along Belvoir Street, and quietly went through the narrow door of the shop one after the other. The drovers rushed in after them, and the animals, without doing any damage, were turned round and returned into the street.

Cricket.

The cricketers of the South London School of Pharmacy met those of the Central School of Pharmacy on Saturday, June 17, at Nunhead. The South London men made a score of 54 in their first innings, Messrs. Anderson and L. A. Cross being the largest contributors with 10 each. The Central School responded with 31, Mr. Jackson alone recording double figures, 11. The South London men in a second innings amassed the respectable total of 102, Mr. Hebdon (26), Mr. F. Baker (25), Mr. Anderson (19), and Mr. Beadle (12) offering the principal resistances. There was no time for any more play, so the match was decided in favour of the South London School by the first innings.

Sudden Death of a Chemist's Assistant.

A young man named Harry Leigh, between 18 and 19 years of age, an assistant with Messrs. Haslam & Wilshaw, chemists, Fore Street, Hertford, died very suddenly last week. Although noticed to be unwell on the Tuesday night, he was apparently not seriously so, and was about as usual and in good spirits. The next morning he was found dead in bed. A *post-mortem* was made, and disclosed inflammation of both lungs to such an extent as to be quite sufficient, according to the medical evidence, to account for death. Moreover, no trace of poison or other cause of death was found either in the deceased's bedroom or about the body. The case was complicated, however, by an extraordinary memorandum,

written in pencil, found in a drawer in the deceased's bedroom addressed "To Dudley," a son of Mr. Wilsbaw, asking him to keep certain things "as a memento of affection and regard." There was no evidence to show when this memorandum was written, but another memorandum on a portion of the same piece of card was undoubtedly written late on Tuesday night, and it is only reasonable to suppose that they were both written about the same time.

At the inquest Mr. Wilsbaw spoke of him as by far the most valuable assistant he ever had. He had had no dispute with him, and he did not think him likely to take his life. Deceased was on very friendly terms with witness's son. He believed there had been some little difficulty where he was apprenticed, but he knew nothing about it. The doctor believed he died in his sleep. One witness, who met the deceased the night he died, said he asked him how he was getting on, and, as far as he could remember, deceased said, "I cannot stand this any longer; I am going away."

The mother of the deceased said he might have thought of leaving Hertford, and that might account for the memorandum he had written "To Dudley." There was a letter he had written to someone at Westgate-on-Sea about a situation without Mr. Wilsbaw's knowledge.

Mr. Wilsbaw said that on Tuesday night the deceased became deathly pale all at once, and Mrs. Wilsbaw asked him what was the matter. He replied, "I am not well at all, and to-morrow I shall see one of the doctors." Mrs. Wilsbaw said, "Mind you do not neglect it," and he replied, "No; I will to-morrow."

Notwithstanding the confidence of the medical witnesses that the death was due to inflammation of the lungs, the jury expressed a unanimous desire for an adjournment, and the inquiry was therefore adjourned till June 29.

Dirty Linen.

Mrs. Louisa Stanley Poole, of Hawley Road, Kentish Town, who has been before the North London Magistrate on two occasions—(1) for annoying Mr. John Arnold, chemist, of Junction Road, Holloway, and (2) for breaking 15s. worth of the windows of Mr. Arnold's father-in-law—was again before the Magistrate last Monday, when she brought evidence to justify her visits to the house in order to find her husband. Mr. Strong, the owner of the house, said Mr. Poole was not there; but, after hearing the evidence, the Magistrate dismissed the summons, adding that it was one of the worst attempts to wash dirty linen in Court that he had seen. Counsel asked his Worship to hear further evidence, but Mr. Lane replied that he believed Mr. Strong was cognisant of all that Mrs. Poole alleged against her husband.

A Raid on a Dentist's Showcase.

At the Greenwich Police Court on Tuesday, Samuel Wallace (21), flower-seller, of no fixed abode, was charged with being concerned with four other men not in custody in breaking open a showcase in the front garden of 474 New Cross Road, and stealing one set and five pieces of artificial teeth, value 3*l.*, the property of Mr. Edward James Smith, dentist. P.C. Berry, 394 R, said that at about 2 o'clock that morning he was on duty in the New Cross Road, and saw the prisoner and four other men drive up in a trap and stop outside the prosecutor's house. The prisoner went into the front garden, and witness heard a smash of glass. The prisoner came into the road again, and, with the other men, moved off a little way and returned. Witness saw him put his hand four times inside the showcase, which contained false teeth. Witness ran up and caught the prisoner in the garden, and another constable found one set and five pieces of artificial teeth on the grass. Mr. Marsham remanded the prisoner for the police to try and find the other men alleged to have been with him.

Suicide of a Chemist.

An inquest was held at Pembroke Dock, on Monday, on the body of Evan Thomas Evans, a chemist. A shipwright in the Pembroke Dockyard, named John, said he called at deceased's residence at 5 o'clock on Friday evening, and accused Evans of having assaulted his daughter, aged 14. The offence was not denied, and witness struck the offender several blows, following him round the room till he finally escaped, and then went to apply for a warrant for Evans's arrest. Dr. Reynolds,

medical officer for the borough, said deceased died from morphia-poisoning. Having examined a bottle in the shop witness came to the conclusion that Evans drank 2 oz. of solution of hydrochlorate of morphia, which would contain about 8 grains of morphia. The jury returned a verdict in accordance with the medical evidence, and exonerated Mr. John from all blame. Evans left a letter in which he declared he was innocent of the charge.

A Doctor's Child Poisoned by Carbolic Acid.

Dr. R. Macdonald held an inquiry at Tottenham, on Monday, with reference to the death of Sydney Hutton, aged one year and eleven months, the son of a surgeon, of Harringay Villas, Green Lanes. Dr. John Hutton, the father, deposed that on Thursday last, about midday, he dressed a patient's thumb in his surgery with carbolic-acid solution. When he had finished he placed a bottle containing about 2 oz. of carbolic acid on a shelf about 4 feet from the ground, and then went to the door to bid the patient "Good day." He had scarcely been absent a minute when he heard a cry, and on rushing back he found the child in the arms of a maidservant with his mouth and lips burned by the acid. The deceased was not in the surgery when witness left, but he must have entered by a door, which was open, leading from the garden, climbed on to a chair, and drunk the acid. Witness at once applied antidotes and sent for medical assistance, but death ensued the same evening. The jury returned a verdict of accidental death, and expressed their sympathy with Dr. Hutton.

A Nurse's Mistake.—Carbolic Acid for a Cough-mixture.

An inquest was held at Bengoe College, Hertford, on June 16, by Mr. T. J. Sworder, Coroner, upon the body of Frederick Vincent Malin, aged 12 years, the son of Mr. Aubrey Henry Malin, Town Clerk, solicitor, and Coroner for Grantam. The lad had been taken with a chill, and was guarded in a dormitory with four boys who had measles. His cough was very troublesome, and a bottle containing cough-mixture and one containing measles mixture had been supplied for him. An extra qualified nurse, Nurse Barnett, had been engaged from the St. John Divine Nursing Institution, South Kensington. Some carbolic acid was in a corrugated bottle in a cupboard outside the room. Nurse Barnett gave the following evidence:—She said she came to Hertford on Tuesday, and took charge of the dormitory in which the deceased was at 6 P.M. She was not nursing under the matron, but she was instructed to give the ordinary (measles) medicine every four hours and the other mixture when the cough was troublesome. The medicine-bottles were on the table just inside the door. Witness received the carbolic acid from the matron, and just then one of the boys required something. She stood the bottle on the table near the medicine-bottles and attended the lad. She afterwards forgot to remove the poison again. Later on she gave deceased and another boy a dose of cough-mixture, and then went to bed. Soon after 1 she was awake by the deceased coughing. She got out of bed and poured out a dose of what she thought was cough-mixture, holding the glass up to the light to get the correct measure. She gave it to deceased and he drank it. He at once said, "Oh, it feels like liquid fire." The thought flashed into her mind that she had given him the carbolic. She did not look at the bottle when she poured the dose out, for she was "not awake, and had hardly recovered her senses." When she gave deceased the glass of medicine she said to him, "Take this; it will ease your cough." Witness first recovered her senses when deceased said it seemed like "liquid fire." Had she known what she was doing she would certainly have read the label. Witness had never had an accident before. She was in a fit state to take charge of the case, having rested the previous night. Witness considered the carbolic was in a proper poison-bottle. Had she been awake she would have known by the feel that the bottle contained poison. She did not regain proper consciousness until the boy complained of the fire. She gave the deceased milk and went for the other nurse at once, but he soon afterwards expired.

The Lady Superior from the Nursing Institution gave Nurse Barnett an excellent character, and three letters from medical men bearing testimony to her care and efficiency were read.

After the Coroner had summed up, the jury consulted in private, and after about a quarter of an hour's deliberation, returned a verdict that the deceased died from the administration of carbolic acid in mistake for cough-mixture by Nurse Barnett under circumstances which satisfied the jury that there was gross carelessness and negligence on her part, but that she was not sufficiently awake at the time to make her criminally responsible for the act.

Sale of Laudanum.

Mrs. Leake, 37 years of age, wife of a commercial traveller, died last week from the effects of laudanum, a large dose of which she had taken while mentally depressed. At the inquest, John Walker, assistant to Messrs. Clare & Hunt, stated that he had sold an ounce of laudanum to the deceased. She said she wanted it for sprinkling poultices. He drew her attention to the fact that it was poison, and she said she did not think it so very poisonous. By a Juryman: There was no fixed limit to the sale of laudanum, the Act merely requiring that the sale should be by a qualified man.

A farm-labourer named Walker, aged 74, bought an ounce of laudanum from Mr. Brown, chemist, Brigg, saying he wanted it to rub his sore feet with. He slept at a lodging-house, and was found the next morning in a dying state, and died soon afterwards.

A Chemist's Difficulties.

In the City of London Court, on Wednesday, before Mr. Commissioner Kerr, the case of Allen and Hanburys v. Kane was heard, in which the plaintiffs sought to have the defendant, Mr. T. J. Kane, chemist, of 47 Albert Embankment, committed to Holloway Gaol for the non-payment of 10*l.* 9*s.* 8*d.* due for chemicals supplied.

The plaintiffs' representative stated that they had already given the defendant every opportunity of paying the debt.

The defendant said he was not able to pay the amount.

Mr. Commissioner Kerr: Do you ever intend to pay?

The Defendant: Yes, if you will make a small order.

Mr. Commissioner Kerr: For how much; $\frac{1}{4}$ *d.* per month? Can't you answer a plain question? What do you propose to pay?

The Defendant: 7*s.* 6*d.* per month.

An order was made in these terms.

Costs of the Pontypridd Baking-powder Case.

At the adjourned Quarter Sessions for the county of Glamorgan, held at Swansea on Tuesday last, it transpired that the taxed costs in the appeal recently heard at Swansea, which resulted in the Court upholding a decision of the Pontypridd Stipendiary that the "Excelsior" baking-powder contained alum, amounted to 667*l.* 14*s.* 7*d.* The original bill was 917*l.* 16*s.* 7*d.*, but 250*l.* 2*s.* had been struck off by the taxing-master. One hundred and fifty guineas had been allowed to Dr. Brunton, 50 guineas to Professor Dunstan, and 15 guineas to Dr. Thompson.

The Coroner and Carbolic Acid.

An inquest was held on Tuesday last, on the body of a married woman named Ann Kammerer, aged 32 years, who lived at 45 Park Street, Liverpool. Deceased had seemed very troubled during the last six weeks, and been very strange in her manner. Her husband, who was an able seaman, had been away for the last two years, and during that time the deceased had never heard from him. On Saturday evening she was found lying on the floor unconscious, with a bottle of carbolic acid in her hand, and there was a strong smell of the acid in the room. She died later from the effects of carbolic-acid poisoning. The jury found that the deceased had committed suicide whilst temporarily insane. The Coroner at the inquest remarked that he would try to get something done in order to prevent the sale of carbolic acid indiscriminately. He was surprised at persons committing suicide by taking carbolic acid, as it was a burning and agonising sort of death. Dr. Betts endorsed the Coroner's remarks, and said that at the Southern Hospital they had far more cases of suicide by carbolic-poisoning than by any other means.

Irish News.

Notice of Examinations.

A quarterly pharmaceutical assistants' examination is to be held on Wednesday, July 12. The last day for entrance will be Wednesday, June 28.

A quarterly registered druggist examination is to be held (at Dublin) on Thursday, July 13. The last day for entrance will be Thursday, June 29. The Belfast examination (if 12 apply) will probably be held on Tuesday, July 18. Applications for same should be received not later than Tuesday, July 4.

Is Kay's Essence a "Patent" Medicine?

Mr. Francis Leonard, grocer, Clanbrassil Street, Dublin who was lately fined 5*l.* and 3*l.* costs for selling Kay's essence of linseed, has served notice on the solicitors of the Pharmaceutical Society to the effect that he intends to continue the sale of that preparation, and is prepared to defend his right to do so. As an appeal for mercy from Mr. Leonard is at present the subject of consideration by the Law Committee of the Pharmaceutical Council, Mr. Leonard would seem to have received some support or guarantee in the matter since he forwarded his appeal to the Society.

Scotch News.

Aberdeen Medicine-contracts.

Mr. J. Alexander, who had tendered to supply medicines, &c., for the current year at 5 $\frac{1}{2}$ *d.* per pauper, has informed the St. Nicholas Parish Board that, in making out his offer, he made a mistake in the calculation and did not understand that the offer included indoor poor. He offered to supply at 9*d.* per pauper. The Board accepted the explanation and offer, which was $\frac{1}{2}$ *d.* below the next highest offer.

The Bogus Pill Company.

The Henderson Pill Company, who have been carrying on business in Edinburgh, and offering to the gullible purchasers of their goods prizes in the shape of rings and watches for some months past, have lately had their doings exposed by a local evening paper. On Tuesday of last week the office of the so-called company was closed by the police. A pile of wrappers for "dozen boxes" of pills, for which in each case 12*s.* had been sent by the unsuspecting applicants, was waiting to be utilised, but the indispensable "extra premiums" in the shape of silver watches and gold rings being wanting, the orders could not be fulfilled. The money orders for these lots, with the exception of about half-a-dozen, had been cashed and banked before the police interfered. In the case of the half-dozen money orders seized, it was decided to return them to the senders. After the bubble burst, inquiry at the two banks where Henderson had accounts showed that all the money had been lifted, and a cursory examination of the accounts made manifest the large sums Henderson had been receiving. It is said that one day no less than 75*l.* had been banked. In addition to thousands of disappointed customers, there are a number of creditors clamouring for their money. The police, it appears, wished to prosecute some time ago, but the Fiscal were disinclined to take extreme measures.

Edinburgh Chemists', Assistants', and Apprentices' Association.

The second botanical excursion of the season took place on Wednesday evening of last week, Colinton Dell being chosen for the trip. There was an attendance of twenty-three. Among the plants collected were *Alchemilla vulgaris*, *Chrysanthemum leucanthemum*, *Cytisus Scoparius*, *Epilobium montanum*, *Geranium molle*, *Geranium pratense*, *Geum intermedium*, *Geum rivale*, *Lathyrus pratensis*, *Luzula sylvatica*, *Sambucus nigra*, *Spiraea Ulmaria*, *Stachys sylvatica*, *Stachys betonica*, *Valeriana officinalis*, *Valeriana pyrenaica*, and *Vicia sepium*.

TENNESSEE has a pharmacy law which applies only to towns of 3,200 inhabitants or over.



NEW YORK IMPRESSIONS.

TUESDAY, May 30, being Decoration Day, kept me in New York a day longer than I intended to stay there. In the demonstration which, in the company of Mr. A. H. Mason, I saw that day, there was exhibited better evidence of American power than is to be found in big buildings and luxurious living. Standing in Madison Square for an hour and a-half, company after company of veterans, soldiers, marines, and volunteers passed us amidst a subdued enthusiasm characteristic of the day which commemorates the men who died in the Civil War. It was a very impressive sight, and when it is remembered that similar demonstrations take place in all the townships and cities of the Union simultaneously, one can realise how much such a demonstration makes for patriotism and what it means for the integrity of the country.

The business-centre of New York is in the extreme south corner of the island upon which the city is built. Most of the wholesale druggists are located in a few streets, and one cannot walk through Fulton Street, Maiden Lane, John Street, William Street, and one or two more, without noticing dozens of names familiar to the English drug-trade. McKesson & Robbins's is a huge place, made up of several buildings, which have been acquired from time

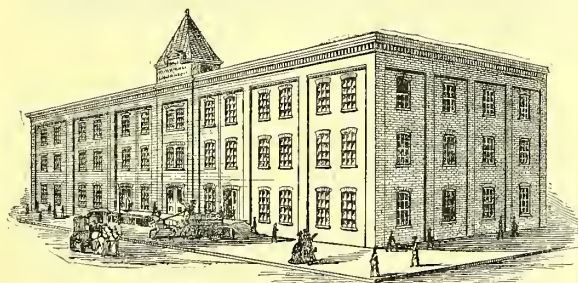
and there is no distinction between principals and servants. The fittings of this office are in oak, writing-cabinets are the same, and the floor is in great part of polished oak. The principal office is a small picture-gallery, many fine oil-paintings, landscapes, and *genre* subjects being displayed on the walls. I went to Orange, New Jersey, to see the laboratories of this firm, which I found far beyond what I had imagined in extent and perfectness. The firm are now building a large warehouse in Orange, by the side of their works, for storage. The sketch enclosed represents the new buildings as they will appear when completed. There is little particularly distinctive about the other places which I visited.

I have looked at a few of the retail pharmacies. So far Hudnut's appears from the artistic point of view far and away the best. It is a single-fronted shop with a bay window, the top of which is domed with stained glass. The centre-piece of the window-display is a fine Venetian vase, one of a pair which cost the proprietor \$11,000. In the corner of the window a tiny automaton representing a Chinaman taps the window and beckons passers-by to come in. The mahogany fittings are in the style of the First Empire, with decorations of gilt festoons in relief. These are really brasswork. The whole of the front shop is devoted to the display of specialties, medicinal and toilet, and perfumes. For these fabulous prices are obtained. The back part is devoted to compounding, and has several features which will be worth referring to by-and-by. Of course, the soda-fountain is one of the prominent features.

IN PHILADELPHIA,

under the guidance of Mr. Warner, jun., I visited the College of Pharmacy. Bloomsbury Square is decidedly second to this institution. There are three lecture-rooms, each accommodating about 400 students, and the pharmaceutical and chemical laboratories are exceedingly well equipped and spacious. The library is a large hall about the size of the examination-hall at Galen Place, and the museum is even larger, reminding me somewhat in area of the Portman Rooms. It has a gallery, and is used as a hall for great occasions, for which it is worthily adapted. Mr. Wiegand, the Secretary, and Professor Trimble, the Attfield of the establishment, were the only officers I saw here, as the school is not in session at present. I saw Professor Maisch at his home in the evening. He is a man of imposing presence, as you know, now silvered in hair. He gave me a hearty welcome, and we talked on College and Congress matters. As to the latter, he is a little doubtful regarding the foreign attendance, but thinks the Congress will be a success. There are some rather unique features about the method of teaching in the College, such as the use of the lantern and of photographs in the materia medica class, which are worthy of attention.

Along with the sketch of the Philadelphia College of Pharmacy frontage, which I enclose, I send one of the New



SEABURY & JOHNSON'S NEW WAREHOUSE AT ORANGE, N.J.

to time, and extending across a whole block to a street behind. The ground or street floor is used solely as an office, and it seemed a little strange to notice that the principals have no private rooms. Mr. John McKesson has his desk at the door amongst the clerks. This is the American plan, and it is carried out even in the fine new Seabury building, not quite to the comfort, I imagine, of Mr. Mason's English susceptibilities. The Seabury office is a model of what offices should be. Every clerk has a wardrobe for himself, with cupboard and drawers,

York College, which is now being built. The faith of the present managers of these Colleges in the future of American pharmacy may be gauged from these imposing structures.

I had much pleasure in visiting the mammoth medicine-factories of Mr. William R. Warner and of Messrs. Wyeth & Brother in this place; also at Messrs. Sharp & Dohme's. I saw many things of great pharmaceutical interest, which, however, must be reserved for future notes.

AMERICAN OPINION ON THE EXPOSITION.

Few things strike the Old World visitor as being more noteworthy regarding Chicago's venture than the gradation of opinion about it amongst American people themselves. Good friends in New York meet one with something savouring of pity when they know that we go West with the World's Fair as our *ultima thule*. And down East, and South through Philadelphia, Washington, and even in Baltimore, we find people still uncertain as regards the merits of the Exposition. It is big?—yes; attractive?—surely; successful?—there is a doubt about that. But as we journey on, the idea



NEW YORK COLLEGE OF PHARMACY.

grows that the Fair is something worth coming out to see, that extortion is rampant in Chicago, and that as the weeks go by and the railway companies offer reduced rates there will be a better chance for the Exposition.

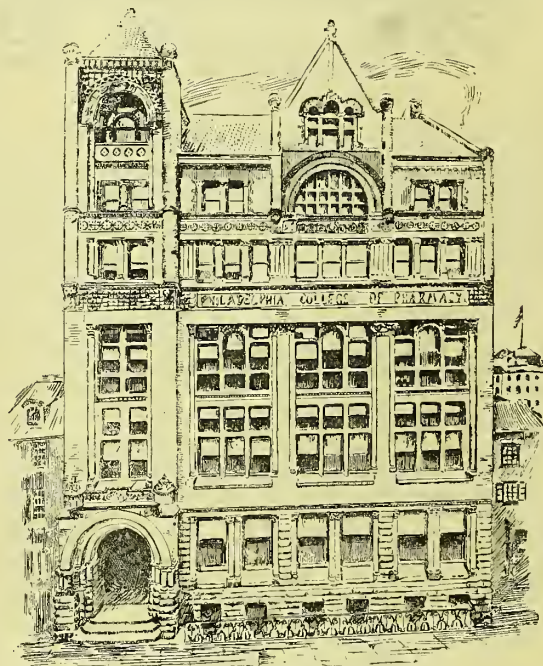
THE RUN OVER THE PENNSYLVANIAN RAILROAD

from Philadelphia to Pittsburgh is unique in its way, for the road crosses the Alleghenies uphill and down, and round that remarkable bend near Altoona which is called the horse-shoe curve. If the train jolted and swayed a little more than it does, perhaps we could work up more enthusiasm about the engineering skill which perpetrated the curve; but as we observe its wide area we cannot help feeling that the engineer left a large margin for safety, and that it might have been as cheap, though desperately conventional, to throw a bridge across the valley. But we must not quarrel with the railroad-track, for it is an exceedingly good one, passing through magnificent hill-scenery (we cannot call

these undulations mountains), and everywhere there are bits which remind us of Surrey and home, as well as tracks of the kind that Dickens has immortalised in "Martin Chuzzlewit." Through this scenery visitors from the Old Country would do well to pass, and if they manage the thing properly, they can get permission to stop at Philadelphia. Washington, the finest city in the States, a perfect marvel of parks and palaces, should certainly be visited by all British tourists, and even Pittsburgh, where Carnegie's steel-works are, has an interest and ugliness worth a few hours' inspection. Passes to view the works can be obtained at the company's offices in Pittsburgh, but if the train stop at Bessemer on the way, the traveller may get off there and walk down to the works. No scientific man is refused admission and a guide, and as it is not every day that one sees natural gas burning in boilers and converters, and steel produced at the rate of four tons a minute, the sight should not be overlooked.

PITTSBURGH GLASS.

The district round Pittsburgh, Pennsylvania, is the Black Country of the United States. There the works which Andrew Carnegie's genius has fostered are situated in the hollow formed by the green-swarded and wooded hills of Bessemer, and across the river lies Homestead, the scene of the great strike last year. But Pittsburgh is noted for something else than iron and steel manufacture. Not many years



PHILADELPHIA COLLEGE OF PHARMACY.

ago there were seventy glassworks in the district, mainly engaged in bottle-making. This number is now sadly reduced through foreign competition and partial failure of the natural-gas supply, but there are still several important works in the vicinity.

I conversed with one manufacturer who established a lamp-chimney factory in Pittsburgh twenty years ago, and has developed this branch of glass-blowing until now he employs 1,000 hands. Mr. G. A. Macbeth, the gentleman to whom I refer, is a typical American, quiet in demeanour, quick in thought, and expressive in speech.

"You must remember," he said, "that we are working up to the European standard, and that we have all the materials, the organisation, and the plant in conditions which are not equalled on the other side. We only want the knowledge which comes of experience."

"What progress have you made on the Old World methods?"

"Plate glass is now made in the States far superior to

what you make; it was a long struggle, with many bitter lessons, before we got it so. As for chimneys, you know I have some chemical knowledge—I was five years at the drug-trade, three in a retail store and two in the wholesale—and I saw there was an opening for first-class lamp-glasses which would not crack. I commenced on strict scientific lines, and have stuck to the same process right through."

"Not varied at all?"

"No; but from 10 per cent. of second-class glasses which could be picked from the first batches, we have come down to 2 per cent. There is always a big percentage of that class of stuff in every glass-factory, but I keep reducing it, and do not allow that glass to go out under my brand."

"How do you keep to scientific lines?"

"By mixing the ingredients proportionately to their chemical composition. All the ingredients which are variable are analysed immediately before use, and the calculations made accordingly. Then I am very particular as to mixing, but I have yet to find a mixer of lead, potash, and sand which is not a separator."

and Pittsburgh, and a woman-citizen of the latter provides this choice bit of enthusiasm, which is quite in

THE SPIRIT OF THE LOCALITY.

We clip her gush from a local newspaper:—

We turn our faces westward and the great "Dream City" rises before us—a beautiful vision too soon to fade, a conception of three years' growth to commemorate the greatest event that has occurred upon the earth since the birth of Christ.

No pen has yet done justice, and no pen can ever exaggerate the significance, of the World's Exposition of 1893. Four hundred years of progress—four hundred years of intellectual growth! Stand at sunset or on the night of electrical illumination in the dome of the Administration Building and survey the marble palaces that outline the great water "Court of Honour." He must be cold indeed whose heart is not stirred to its utmost depths. The nineteenth century sets in a blaze of glory: it culminates at our feet!

And so on. The "Dream City" here referred to is the Exposition. The wildest dreamer could not apply the title to



STATE STREET, CHICAGO.

"The more you mix, the more they separate, I suppose."

"That's it. Of course, I rely most of all upon my furnaces. They are the largest in the world, I should think. There is one which takes from fifteen to twenty pots measuring 16 inches by 52 inches, and capable of producing tons of metal. I can get a very high and equal temperature in the furnaces, natural gas being our fuel. One of my factories is away West, at Keystone, about 160 miles from Chicago. We have a better supply of natural gas there, but we did not open the factory for that reason. There we are in the centre of a big market, and save freight. In economy, too, we are ahead of the foreign manufacturer. Three hands working together produce one finished chimney every forty seconds."

At Pittsburgh we touch the first real enthusiasm regarding the World's Fair. The people there have no doubt about it, and have infinite faith in Chicagoans. They pooh-pooh New York folks and belie the cognomen of the Quaker city in the suggestion that the Eastern coldness is the New World parallel of what exists between Liverpool and Manchester or Glasgow and Edinburgh. Human nature is the same all the world over. There is kinship between Chicago

CHICAGO ITSELF

There is more of the nightmare than the dream about it, the approach by rail being of the most depressing nature, ramshackle houses, rickety fences, and Gargantuan advertisements shocking the senses after the refinement and splendour of Washington. Nor does the impression quite pass off when we make the acquaintance of the really fine streets and splendid mansions of the city, but the first horrifying revelation gives place to admiration for the organisation which has planned the city, and astonishment at the skill and enterprise which have made a gigantic swamp a fitting habitation for close upon 2,000,000 men and women. All the great streets running north and south are marvels of perspective, and the more recent of them—Michigan Avenue particularly—are delightful boulevards which vanish in the horizon; but, in every respect, State Street is the thoroughfare of Chicago, and there some of the most notable mansions are placed. To the right in our picture is Palmer House, the hotel built by the husband of the lady who at the present day leads Chicagoan society and entertains princes. Architecturally, it is not striking, because it lacks the unnatural height and

has more refinement than the Masonic temple and Columbian mansion in the same street. But it is a mistake to regard the city from the architectural point of view at all, unless in respect to the liberal use of steel in laying foundations, and in strengthening walls and making floors. It is the business of the city and of the men and women in it which attracts attention. With or without a World's Fair the streets are alive with men and women every day, for Sunday has little sacredness in Chicago, and there is evidence all round in business-like shop-windows, pavement-shows, and the absence of sandwich-men, of the eagerness to make money. Tram-tracks score the streets with myriads of angles, and the ears travel over them at railroad pace. Means for refinement, for elevating the moral tone and social life of the people, are at a discount, and, probably, it would be too much to expect that of a city which has more than doubled itself in ten years, and which is still growing.

THE EXHIBITION DISTRICT.

So much has been published in England regarding the way that enterprising people have run up hotels in the vicinity of the Exposition that little need be said about that in *THE CHEMIST AND DRUGGIST*. It is a fact that buildings have been rushed up, and are still occupied by workmen. Five miles from Jackson's Park we begin to see evidence of that in the hollow-eyed buildings which are set forth as to be ready for occupation on May 24 or June 1. Dozens of such places are to be seen on the journey from Congress Street by the elevated railway. So far there has been no need for these places, and it is questionable if there will be at all while the Exposition is open. The immediate result of the rash and rapid building will be that the speculators will go into bankruptcy, the hotels will be turned into tenements, and rents in Chicago will sink far below their present abnormally high rates. Casual visitors to Chicago should live as near the centre of the town as possible, where they will have little trouble in getting a habitable bedroom at \$2 per day. By the way, a great deal of nonsense has been written about the high rates prevailing in Chicago. Rooms are from 25 to 50 per cent. dearer, and boarding-houses are run at private hotel rates, but the restaurant rates are substantially the same as in New York and other first-class American cities. When all the hotels in the Exhibition district are opened, the old-fashioned rule of supply and demand will quickly establish itself on new ground. Late visitors will benefit by that, but we should advise no friend of ours to live near the Exposition. The district is one great swamp glossed over by enterprising builders. On rainy days rank grass peeps up through sloughs and lakes; even the Exhibition walks, in spite of islands of gravel which have been laid down, become oceans of mud, and the wet is not improved by the chill breezes which blow in gusts from Lake Michigan. In spite of many disadvantages, however,

THE FIRST GLIMPSE OF THE FAIR

is decidedly impressive. The buildings are not the monsters that we should expect from the descriptions and dimensions given in *THE CHEMIST AND DRUGGIST* of April 29 last. As we view them from the Elevated or Rapid Transit Railroad, we see that the architecture and the dimensions are wonderfully consistent, that the more solid structures are free from gaudiness, and that any display which there may be is consonant with the commemorative spirit which dominates the whole. There the unison ends, for internally the separate buildings are nothing to boast about. The principal excrecence on the grounds is a huge iron wheel, some hundreds of feet in diameter, which is to carry swing boats. It is a senseless thing, recalling in some sense the Eiffel tower, but lacking the grace and utility of that Parisian wonder. The most novel characteristic of the surroundings has been provided by Nature in Lake Michigan, which laps the grounds and penetrates them with lagoons, thus furnishing the medium for the play of electric-launches which scud everywhere to the delight of

THE VISITORS.

They say that the Fair has not begun yet, and that we must wait until July or August before we can judge whether it is a success or not. If so the World's Columbian Exposition will be phenomenal amongst the many World's Fairs

that have been held since 1851. The fact that in this second week of June packing-cases still stand in the halls unopened is so much the worse for the Exposition, and a drag upon its popularity. So far the last Paris Exhibition beats the Chicago one in attendance, and that is a hard fact to the promoters here to digest. But it is fair to them to say that their auditor, in figuring up the receipts and expenses during May, finds that the receipts will exceed the expenditure by about \$250,000. As the expenditure was heavier in May than it will be again during the entire period of the Exposition, and the receipts are many times lighter than is anticipated during the coming months, the directors are hopeful that the show will be a financial success. The expenses of the Exposition have been so reduced that they will not hereafter exceed \$100,000 a week, and should the average profits of May (about \$25,000 a day) not be exceeded, the balance-sheet would still show a small net profit. The officials are more than satisfied. It was not expected that the receipts would exceed the outlay for the operating expenses the first month.

The highest attendance at the Exposition so far has been 139,979, which was on Decoration Day (May 30). On the opening-day the crowd numbered 137,557, and the day following only 19,524 attended. It may be mentioned that the admission-fee is 50 cents, or double the fee which has ruled in all European exhibitions. It need not surprise us, therefore, if the Exhibition should pay, and we must also bear in mind the fact that the authorities have made everything possible into concessions, and have sold them at heavy prices. For example, the right to publish the official catalogue was sold to a firm for \$100,000. Another firm purchased the exclusive right to take photographs in the Fair-grounds and to sell the same, and in consequence they permit no camera but such as will take quarter-plate pictures to enter the building, and that only when a fee of \$2 per day is paid. But before one can get that length he has to apply to the official photographer, Mr. Arnold, in the Service Building, near Sixty-second Street gate, pay him the fees, and then present the order for a photographic pass at the Bureau of Admissions in the same building. Concessions have been sold at heavy sums for permission to supply food, and these are accompanied by a strict injunction against anything but the most simple cooking within the Exhibition grounds. Consequently most of the foods are cooked outside and reheated in the restaurants, but steaks are allowed to be grilled. The executive gets 25 per cent. of the receipts from caterers, and for this the hungry have to pay. Turning now to

THE EXHIBITS,

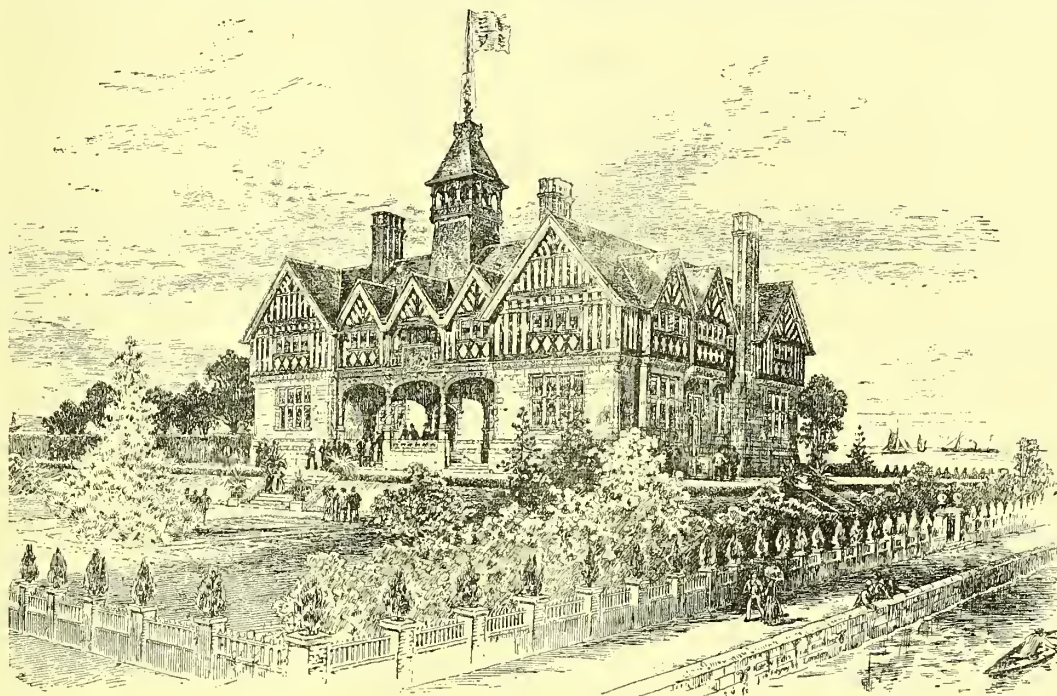
we do not propose in the present rapid survey to do more than take a general view of chemical and pharmaceutical exhibits within the Hall of Manufactures and Liberal Arts, where the principal exhibits interesting to pharmacists are to be found. The English visitor is at once struck with the comparative poverty of the section devoted to British exhibits. Germany, France, Russia, Belgium, Denmark, and other continental countries have their sections bordered by pavilions of magnificent proportions and artistic effect; but the British Commission have chosen to leave that entirely to the exhibitors themselves, the consequence being that our exhibits look like a picture without a frame. A few paltry red cloth signs indicating by white letters that this is "Great Britain," and some festoons of Union Jacks, are all that our Commissioners appear to have done to help our exhibitors to appear well before the nations of the earth, and beside our near neighbour, Germany, our manufactures are dwarfed most miserably. The whole of the large Government grant appears to have been expended on the Victoria House and the comfort of the Commissioners. This Victoria House is a structure of the Elizabethan period, decorated internally regardless of expense. It is thoroughly British, the first thing that meets our eye being a veritable British bobby, who stands in the doorway, and with warning finger informs us that the house must not be entered. We manage to pass him on some pretext or other, and when we reach the office are told that there is no room for British visitors to rest themselves, no place where one may write a letter—nothing but comfort and elegance for the Commissioners and their staff. So it looks very like the old tale of personal

appropriation which has dogged all British efforts in the exhibition line.

Nearly all British exhibitors are well placed on the floor of the hall, or in the Liberal Arts Gallery. Burroughs, Wellcome & Co.'s display is the biggest and most effective in the pharmaceutical line, two of their large Indian cases being placed on the floor, with desks and some interesting objects to set them off. Pears have a beautiful case, an ivory-white setting to a nice selection of their goods; and the Crown Perfumery Company, Atkinson, and others, make pretty displays of perfumery and soaps. Lever Brothers have a magnificent house or pavilion which is decorated with frescoes of a high grade of art. Stevenson & Howell are the principal exhibitors of English essential oils. The chemical exhibits include a quaint house for Brunner, Mond & Co. (Limited), but the samples are not displayed at the time of writing. The United Alkali Company have two cases, one full of specimens, the other empty. In the gallery makers of scientific instruments are well represented, F. Darton & Co. having the best position. Each exhibitor in the British section has been allowed freedom of taste in respect to the display of his goods, so that there is no

expense to make their show in every way elegant. Grey and gold are the prevailing tones of the decoration, but there are several magnificent paintings which of themselves bring visitors into the pavilion, and there they find soft couches to rest upon, which is a 'cute idea in a place where 10 cents is the price of a seat. The exhibits by Schering's, the Badische Anilin and Soda Fabrik, Benno Jaffé & Darmstaedter, Dr. Witte, and other well-known German firms, are of high educational value, and cannot fail to be of great service to German trade.

I have also noticed on the floor small pharmaceutical exhibits in the Russian, Danish, Dutch, and Austrian sections. American pharmaceutical firms are placed in the gallery, Fairchild, Wyeth, Sharp & Domhe, Warner (of Philadelphia), Mulford, and Lehn & Fink being particularly attractive. The surgical and dental departments far outshine these, however, the exhibits being the finest collection which has probably ever been brought together. Seabury & Johnson and Johnson & Johnson are the principal exhibitors of plasters and antiseptic dressings, and the S. S. White Dental Company make the finest display illustrative of dentistry. Commercial exhibits are of minor importance in the galleries, however,



THE VICTORIA HOUSE.

uniformity in the cases. This is in striking contrast to the German and French sections. The latter contains a fairly representative group of French pharmaceutical manufacturers, such as Chassaing, the Pharmacie Centrale, and Adrian, and of perfumery houses, amongst them many of those who made fine displays at the Paris Exhibition. Here the same artistic elegance and uniformity of cases obtains. One enterprising firm have made the inside of their case a miniature facsimile of the interior of the Grand Opera in Paris. The same tone of decoration—black and gold, grey and gold, &c., according to the nature of the exhibits—prevails throughout, and, as has been said, the pavilion is worthy of French art.

Germany is even more rigid in respect to uniformity, and the border-pavilion is a massive screen heavily decorated in relief, and backed by plush curtains, with colour relief in fresco, and oil-paintings, some of which are of historic interest. The chemical section is one of the best-organised parts of the Exhibition. It occupies a large corner of the space, and the cases form a quadrangle, in the centre of which is a pavilion used by the secretary of the section. There appears to have been a successful attempt on the part of the exhibitors to work together, and they have spared no

the greater part of the space being given up to education; and here, again, Germany has succeeded in showing her strength, the exhibits by the Deutsche Chemische Gesellschaft of synthetic chemicals produced in the research laboratories of the universities and chemical-works, and the diagrams showing the progress of the Society, being, perhaps, the best possible evidence of the spirit which prevails in Germany at present. Bacteriology and medicine are not left out, and even the education provided for artisans is illustrated in a concrete form.

The States of the Union are the main contributors to this section, however, and all who take an interest in education should spend some time in the department.

I am glad to say that some of the British colonies and dependencies have come well to the front, and the enterprise of Canada, India, Ceylon, New South Wales, and others help to make up for the shortcomings of the Mother Country's Commissioners. I have seen enough of the Exhibition to convince me that it deserves to be called "The Greatest Show on Earth": my only fear is that the extent of it is more than an ordinary person visiting Chicago can take in in a reasonable time. But we shall see what the mixture will amount to after careful sifting.

Legal Reports.

PHARMACY ACT CASES IN MANCHESTER.

THE SALE OF CHLORODYNE AND LICORICINE.

BEFORE his Honour Judge Heywood, in the Manchester County Court, on Wednesday, the Pharmaceutical Society sought to recover penalties in two cases from unqualified persons for keeping open shop for the sale of poison. The cases excited much interest, and the attendance in court included several of the chief officials of the Patent-medicine Vendors' Defence Association (Limited).

The first case was that of

THE PHARMACEUTICAL SOCIETY v. DELVE.

The defendant, a druggist, carries on business at 241 Stretford Road, Manchester, and the penalty sought to be recovered from him was the sum of 5*l.*, for his having, on November 17, 1892, kept open shop for the retailing, dispensing, or compounding of poison—to wit, a preparation of morphine called licoricine—contrary to the provisions of the Pharmacy Act, 1868.

Mr. Grey, instructed by Messrs. Flux, Son & Co., appeared for the plaintiffs, and the defendant was represented by Mr. Mulholland.

In reply to a preliminary inquiry from the Bench, as to the nature of the case, Mr. Mulholland produced a report of the action of the Pharmaceutical Society against Piper, in which he said the Divisional Court decided that chlorodyne was a poison within the meaning of the Act. The present case was practically the same sort of case. There had been no attempt to go further than the Divisional Court with the case of Piper, and he could not very well hope that his Honour would reverse the finding of the Divisional Court. They proposed, however, to go seriously forward with this case in order to obtain a review of the matter.

The Judge: Do I understand you to say that this is a case on all fours with the other?

Mr. Mulholland: I do not know that it is; I do not know how the case will turn out on the analysis. I am inclined to think that my medicine has such an infinitesimal quantity of morphia in it that it will not be on all-fours with the chlorodyne case.

The Judge: And you think it will go to the Court of Appeal?

Mr. Mulholland: Unquestionably we shall go to the highest Court. But we should like to have your Honour's opinion on the quantity of poison on the facts.

The Judge: That is all?

Mr. Mulholland: Yes; I won't trouble you with much law, and I won't ask you to reconsider the judgment of the Court above, but merely to take the facts as they appear.

Mr. Grey, proceeding to open the case for the plaintiffs, stated that the licoricine in question was bought at the shop of the defendant by a Mr. Fouldes. On analysis it was found to contain a preparation of morphine, which was within the schedule of the Act of 1868. He proposed to go pretty fully into the Act, as it would save trouble with regard to the case of Lewis & Co., which was to follow.

The Judge said he thought it would be better to take one case at a time. He understood that they only wanted the facts here.

Mr. Mulholland: There is only one point, and that is whether this licoricine is a poison within the meaning of the Act?

Mr. Grey said that was so, and there were three sections which had to be considered with regard to that.

There was section 1 which said: "It shall be unlawful for any person to sell or keep open shop for retailing, dispensing, or compounding medicines . . . unless such person shall be a pharmaceutical chemist or a chemist and druggist within the meaning of the Act."

The Judge: We know he is not a pharmaceutical chemist. We need not trouble about that; it is not disputed.

Mr. Grey said then there was section 2, which referred to certain scheduled articles which "shall be deemed to be poisons within the meaning of the Act, and the Council of the Pharmaceutical Society of Great Britain (hereinafter

referred to as the Pharmaceutical Society) may from time to time by resolution declare that any article in such resolution named shall be deemed a poison within the meaning of the Act," &c.

The Judge: Is there any resolution with regard to this?

Mr. Grey: Yes; this is a poison by resolution.

Mr. Mulholland: What poison?

Mr. Grey: Morphine—a preparation of morphine.

Mr. Mulholland said he admitted that a preparation of morphine was poison within the Act.

Mr. Grey said that section 15 of the Act, to which he would next call attention, dealt with the restrictions on the sale of poisons, and laid down the penalty payable by anyone not properly qualified who sold poisons made in pursuance of the Act.

The Judge: I have no doubt that Mr. Mulholland admits, if he is shown to have sold a preparation of morphine, that he has committed an offence.

Mr. Mulholland: Well, I won't admit it; but I will admit it for the purpose of to-day—I mean I will come within the decision of the Superior Court.

Mr. Grey: Well, that being the case, I propose to call the evidence at once.

Mr. Arthur Fouldes, the first witness called, said: I am a private inquiry agent, and carry on business in Salford. In November of last year, the 17th—I remember the date, because it was the date of Mr. Balfour's petition—I went to 241 Stretford Road. The name of Mr. Delve was over the door; but I cannot say what else.

The Judge: Does anything depend on that, Mr. Mulholland?

Mr. Mulholland: There is a point whether or not the defendant's shop is a shop for the retailing, dispensing, or compounding of poison. I must take a point on that.

Examination continued: I cannot say exactly what was over the door in addition to the name; but there was another sign, and I think it said "Drug Store and Medical Depot," or something like that. I asked for a bottle of licoricine, and the bottle now produced is that which was handed to me.

Mr. Mulholland: It was in a sealed-up packet when he bought it. It is what is called a proprietary medicine. It is not under Letters Patent; but we call it a patent medicine, and that is one of the points.

Examination continued: I took the bottle away from the shop, and handed it over to Mr. Moon.

Cross examined: I would not be sure whether the words "Drug Stores" were over the shop. The words might be "Cash Stores," but I am not sure.

Re-examined: There was a bill in the window advertising licoricine.

Mr. Harry Moon said: I am a clerk in the offices of the Pharmaceutical Society. I received from the last witness the bottle produced, and handed it over to the analyst in the state in which I received it. The Inland Revenue stamp was over the cork and some sealing-wax.

Mr. Ernest John East, F.I.C., said: I am an analyst, and an assistant to Professor Atfield. On March 10 last I received a bottle from the last witness. I analysed the contents and found it to be a preparation of morphine.

Mr. Mulholland: That is using the words of the Act of Parliament. Just let us have the analysis.

The Judge: What did you find?

Witness: I found morphine.

The Judge: In what quantity?

Witness: I did not estimate the actual quantity.

Mr. Grey: But you did find a preparation of morphine in the mixture?

Witness: I did.

Mr. Mulholland: No, no; morphine, he says.

The Judge: I am not responsible if he alters his expression. He said before he found morphine. Does he wish to alter that?

Witness: No; I found morphine.

Cross-examined by Mr. Mulholland: Well, if you cannot tell the actual quantity, is that what chemists call a trace?—No; more than a trace.

But you cannot tell us what it was?—No; not in actual figures.

Do you mean it was so slight you could not take the figures?—I was not instructed to take the figures.

Is that your only reason?—That is my only reason.

May it not be—I am reading from my own analysis—that the quantity of morphia was .02—that is a fiftieth?—Do you mean .02 per cent.?

One-fiftieth of a grain per fluid ounce?—That might be the figure, but it might be much higher.

This is a 2-oz. bottle is it not?—More than 2 oz.; 3 or 4 oz. I should say.

The Judge: Does that mean one-fiftieth of a grain altogether that the licoricine contained?

Mr. Mulholland: No; the total would be three-fiftieths of a grain in solution, I suppose. (To Witness) I suppose if you took the whole thing at a gulp, it would not do you the slightest harm?—It would depend who took it.

Suppose you took it?—It would be a dangerous amount for a child.

If an adult took it, would it affect him in the slightest degree?—I am not prepared to say; I am not a medical man. I say it is a dangerous amount according to the person who took it.

Either give us an opinion or not, if you please. Would it do an adult any harm?—I am not prepared to say.

Mr. Mulholland: If you are not prepared to say, do not give us your opinion; you seem to know about babies, but not about adults.

The Judge: Do you leave it there, Mr. Mulholland?

Mr. Mulholland: Yes, I think so; it is impossible to know what would do a baby harm.

The Judge: Is that your case, Mr. Grey?

Mr. Grey: Yes; except that I wish to draw your attention to the fact that the word "Poison" appears on the label.

The Judge: It says that the provisions of the Pharmacy Act require it to be labelled "Poison."

Mr. Mulholland: That is under the 17th section, and I do not suppose my friend says it affects this matter.

Mr. Grey: Well, if it is poison under the 17th section it is poison under the 15th section.

Mr. Mulholland said the first point he proposed to take for the defence was upon section 1, and it was that the summons here in the particulars charged them, not with selling this article, but with keeping open shop for retailing, dispensing, or compounding poison, which was quite a different thing. It might well be an offence, if you proved it, to sell a poison, and the same facts might not support the charge which was made here. Anyone who sold poison, no matter whether he kept a shop at all, brought himself under the section. His first point was that the facts that had been proved did not warrant the statement that his client kept open shop for retailing, dispensing, or compounding poisons. He did not much rely on the plural number, but the only offence here was that they had kept open shop to sell this thing. He submitted that they had not retailed this poison, because retailing meant taking a smaller proportion from a larger and selling the smaller, and no handing over a preparation contained in a bottle as was done in this case. This was his first point; it was a small one, but it might serve. He also took all the points that were taken by counsel for the defence in the Pharmaceutical Society against Piper. That would enable all the points to be disposed of in the Superior Court. He was further going to distinguish this case altogether from the case against Piper on the ground that the quantity of morphia contained in the licoricine was infinitesimal, and that the case of a very small quantity of poison being added was expressly separated from the offence alleged against Piper. Both Mr. Justice Lawrence and Mr. Justice Collins said that in giving their decision they did not profess to deal with cases such as this. In chlorodyne the poison was as much as a grain to an ounce, which was a very considerable quantity, and it was expressly stated that if a person drank a bottle it would kill him—kill ten people, indeed—and this was the amount on which the judges went. In this case the quantity was entirely different. He supposed that the reason the quantity was not analysed for in this instance was that it was so slight. He had direct evidence to show that an adult could have taken the whole of this bottle with the greatest impunity, and he asked the Court to draw from the evidence it had heard the inference that an adult would not have been harmed by taking it. Of course it might be asked if it would not do a person any harm, what was the good of it? (Laughter). As a poison, he meant. (Renewed laughter.) He would offer Mr. Davis's evidence on that point.

The Judge: I am inclined myself to think that there has been no case made that you are called upon to answer. In my opinion, if charges of this kind are to be made, they ought to be made with the greatest care, and it ought not to be supposed that the case is established against the defendant by what I call the very loose evidence which has been given in this case. In the case of the Pharmaceutical Society against Piper, where they had to deal with a thing which is known to be of a most dangerous character, they went to the trouble of getting an analysis and gave the most complete information to the Court in reference to the poison; but here, apparently, the gentleman who is called to show the presence of poison in the mixture had never been asked to bring his mind to bear on this most important point. It seems to me that evidence ought to have been given to show that a substantial quantity of the morphine was present in this mixture. At most, this evidence amounts to a guess, and I think it would be monstrous if I were to impose a penalty of 5*l.* on anybody on a mere guess that it might be there was a portion of a grain per ounce in the licoricine. It may be that the quantity is under a hundredth of a grain or five hundredths of a grain. It is clear to my mind that the quantity in this case is very small, and that the plaintiffs must have had some reason for not giving the analysis. I think, at any rate, it is their duty to make out their case, and they have not made it out satisfactorily to my mind that there is a sufficient quantity of poisonous material in the bottle to bring this within the Act of Parliament. Judgment must be given for the defendant.

Mr. Grey: I was going—

The Judge: Do you want to appeal?

Mr. Grey: Yes.

The Judge: Then I give you leave.

Mr. Grey: Yes; but I was going to say that it was said my friend was first to call attention to his points, and then I would call attention to my points.

Mr. Mulholland: But, as I understand, his Honour as decided on the facts.

The Judge: It is on the facts I decide. If you had had evidence to show there was a substantial quantity of morphine in it, I should have had no hesitation in deciding.

Mr. Grey: My point is, that if there had been any quantity of morphine whatever—

The Judge: I agree with the reasoning of Mr. Justice Collins entirely on that point. You may reduce the thing to an absurdity unless you have definite evidence before you. Supposing you have the smallest drop you can possibly get of morphine in that bottle, there would be the presence of morphine, and I do not know, on the evidence before me, that there is more than a mere trace of morphine in it. Your witness says he thinks there is more than a trace; but, in my opinion, if you wish to make out a case, you must be more definite with your evidence, and on mere guesswork I am not going to assume there is a sufficient quantity of morphine in it to make it dangerous for anyone to take.

Mr. Grey: Your Honour having given us leave to appeal, it is necessary to state the points of law, and I have been shut out from that.

Mr. Mulholland: I have no objection to his Honour taking a note of your point of law.

The Judge: I will say in my note, "Leave to appeal, the plaintiffs contending that the presence of any morphia whatever in the mixture renders the defendant liable under the Act."

Mr. Mulholland: Yes. Judgment for defendant with costs?

The Judge: Yes.

THE PHARMACEUTICAL SOCIETY *v.* LEWIS & CO.

IN the second case the defendants were Mr. Eliot Samuel Levy and Mr. Beresford Samuel Cohen, trading as David Lewis & Co., at 106-122 Market Street, Manchester, and the penalty was claimed for their having, on March 28 last, kept open shop for the retailing, dispensing, or compounding of poison—to wit, a preparation of morphine called "chlorodyne."

Mr. Grey again appeared for the Society, and the defendants were represented by Mr. Sutton and Mr. Lazarus Langdon.

Mr. Grey stated that in this case the defendants were partners, and they carried on the drug portion of their busi-

ness on the ground floor of the premises in Market Street, in one of the spaces into which the department was divided. There, on March 28 last, a bottle of Dr. Collis Browne's chlorodyne was purchased. That, he thought, was admitted.

The Judge inquired how Mr. Sutton proposed to meet such a case?

Mr. Sutton said he was not taking the case on that point, although they asked his Honour to reserve the point, as was done before.

The Judge: I shall decide chlorodyne is poison.

Mr. Sutton: I do not ask you to do otherwise, but that you will reserve the question as to the patent medicine. One of the points raised in the case which has been quoted was that it was a proprietary medicine that came within the meaning of the word "patent."

Mr. Grey: It is not a patent.

Mr. Sutton: We only ask you to reserve the point.

The Judge: It appears to me you are going to appeal against the decision of the Judges.

Mr. Sutton: We are going to do it, sir; but that is not our point in this case. Our point is: that one of the partners is a chemist and druggist, registered, and that the mere fact that there is another partner who happens not to be on the register does not affect the question.

The Judge: How do you get over that, Mr. Grey? You know that is how it is done in the Civil Service Stores.

Mr. Grey: I was going to call your attention to that. Even putting it on the highest point, that they could prove that Mr. E. S. Levi, whose name is on the bottle, was a partner in the business, that would not take him out of the Act.

In the course of further argument, it appeared that the name of Mr. S. Levi appears in the register, and that plaintiffs' solicitors had endeavoured to ascertain whether he was the same as Mr. Eliot Samuel Levy, now summoned as a defendant. This, however, they had not succeeded in doing, the defendants' solicitors refusing to satisfy them on the point, although they had more than once been applied to. This assertion was denied by defendants' counsel, who now admitted, as he said he had done before, that the two names were the same, and that the difficulty had arisen through Mr. Levy having assumed the name of "Eliot" since he was placed on the register. In view of this admission, counsel for the Society consented to the withdrawal of the case as against Mr. Levy. The plaint was amended by the striking out of Mr. Levy's name.

The Judge said the plaintiffs then contended that the other partner was liable to the penalty, because he was not also registered. It was admitted that the bottle of chlorodyne was sold to some person with the label on it, "Sold by S. E. Levy, chemist and druggist by examination."

Mr. Sutton: And it was sold by a duly-qualified assistant, a person who is also on the register.

Mr. Grey: I cannot admit that. According to my facts, it was sold by a girl.

The Judge: Well, at any rate, it was sold in that department on March 28 of this year. I will say in my note, "Contended by the plaintiff that, although Levy is qualified, the other defendant ought also to be qualified." Now, what arguments have you, Mr. Grey, in support of your case?

Mr. Grey said he would refer his Honour to the case of the Pharmaceutical Society against the London and Provincial Supply Association (Limited), which went up eventually to the House of Lords. The defendants in that action were a company registered under the Companies Act, and one of them, Mr. Henry E. Longmore, who held five shares, was a registered chemist, and he managed the drug department of the company's business. In the report he held in his hand, it was held that the corporation—because it was proved they were a corporation—was liable. That was reversed, but there was one passage in it which he would call attention to. It was *dicta*, of course, but it was never reversed by the other decisions which went up to the House of Lords. It was laid down by Chief Justice Cockburn that it was fully admitted on the argument, nor could it be contested, that if this had been an ordinary partnership, the individual partners, such of them as were not qualified under the statute, would have incurred the penalties set out in the Act, which sought to prevent the sale of poison except under the control of a duly-qualified proprietary.

Under the case of Regina v. Wheeldon the girl who had sold the chlorodyne would in this case be liable, but they were proceeding not against the girl for selling, but against the proprietors for keeping open shop. The whole argument in the case of the London and Provincial Supply Association was that the association being a corporation, no action would lie against them in their corporate capacity, but if they traded as individuals, as had been done in this instance, then they would be liable. A corporation could not be treated as natural persons who could be examined. He said at once that if Lewis's were a corporation, they would come in under that. In support of this contention he quoted the opinion of Lord Thesiger and others.

Mr. Sutton said that no doubt Lord Cockburn expressed an opinion which would seem to favour the plaintiffs in this matter; but it was based on a view of the objects and scope of the Act, which was repudiated in the House of Lords, and therefore the *dicta* were no longer binding. The meaning of the Act he ventured to submit was this. It was not the keeping open shop alone, but the keeping open shop for the retailing and compounding of poisons. What the House of Lords said was that the object of the Act was to protect the public against unqualified persons selling. That was the great thing. The point here was that the defendants were a firm which was a kind of corporation, and was recognised as such by Scotch law, although not in England. Each individual, as it were, represented the whole firm, and the charge laid against them was a joint charge, and if it was not an offence in the one, how could it be an offence in the other? The whole department was carried on by duly-qualified persons, so that there was not present the mischief which the Act was aimed at. Just consider where they would be landed if the opinions of the plaintiffs were to prevail! Take the case, for instance, of a chemist who was a sleeping partner, who never came near the shop at all, and who was not a registered man. If the argument were correct, then that person, who never entered the shop at all, and probably was not living within miles of it, would be liable under the Act. Well, if that was so, the Act went far beyond the mischief it was intended to guard against. If the Act could not reasonably be said to apply to a case of that kind, how could it be said to apply in this case, where the defendant, so far as the drug-business was concerned, was practically no more than a sleeping-partner, and did not interfere with the business at all?

The Judge said that in order that the Court above might understand the case properly, and distinguish it, if necessary, from other cases, he thought it was necessary that they should take the evidence.

Mr. Samuel Edward Levy was then called, and said in answer to Mr. Sutton: I am in partnership with Mr. Cohen, and carry on business as Lewis & Co. The plan and photograph produced show the position of the shop, and of the drug-department. My partner leaves the management of the drug-department entirely to me, and I look after it. I engage all the persons who are employed in the department. I do not buy every article; much of the buying is done by my superintendents. Mr. Cohen has nothing to do with the buying of the drugs. They are usually bought by a person who has been in my employment ten or twelve years. He is a sort of warehouseman. He manages the buying-department when I am away. With regard to the selling part of the business my partner gives no orders whatever.

Cross-examined by Mr. Grey: I am at the shop every day nearly. When I am away the business is attended to by the servant who has been spoken of. His name is Walsh. He is not a qualified man. The profits of the drug-business are divided between the partners, and the drugs are bought out of partnership money. I have the power to interfere in any department if anything goes wrong. My partner can interfere in the drug-department, but he never does.

Is this the only business of yours, then? You do not carry one on in Liverpool?—No.

Is this your only business?—I have one in Birmingham.

Have you a drug-department there?—I do not control Birmingham.

The Judge: I think you must confine yourself to Manchester.

Cross-examination continued: No poison-book is kept in

the drug-department. We do not sell poisons—Battle's vermin-killer, strychnine, and things of that sort.

You say you do not dispense poison, but you sell proprietary medicines?—It depends on what you call poisons.

I said medicines—take chlorodyne.

The Judge: Take Fellows's Syrup; it is a poison, I suppose?

Mr. Grey: It contains strychnine. (To Witness.) And you have a large quantity of those things in your possession?—Yes.

Who have you got besides the warehouseman to look after the poisons?—We keep Fellows's Syrup and all those poisons locked up.

Then you do not dispense any poisons?—We do not dispense poisons.

Except proprietary medicines, do you sell poisons or not?—No. I was not in the drug-department at the time this chlorodyne was sold; the warehouseman I have spoken of was in charge.

Mr. Sutton said he proposed to briefly examine Mr. Cohen.

The Judge: I do not think it is necessary. On the facts certainly should believe Mr. Levy's story, and I do not think you need to verify it. I see no reason to doubt anything Mr. Levy has stated. The case as it stands is whether Mr. Cohen, being a partner in this firm of Lewis & Co., is responsible for the penalty for the sale of the chlorodyne, notwithstanding the fact that Mr. Levy is registered under the Pharmacy Act.

Mr. Grey: I beg your pardon for interrupting. Your Honour has said "for the sale." It is really for the keeping open shop; there is a difference there.

The Judge: Yes, I am obliged to you for reminding me. The question is whether, when the two are dealing in partnership together and keeping one warehouse which is divided into departments—whether the one, by taking a certificate or registering under the Pharmacy Act, can, so to speak, qualify his partner also as under the Pharmacy Act. Now, I was very much struck with what was said by Chief-Justice Cockburn in his judgment in the Queen's Bench Division. It is quite true that when the case gets to the Court of Appeal and the House of Lords the judgment seems to be based on a different question altogether. Really a great deal of the argument and examination in the Lords goes to ascertain whether a corporation can really be a "person" within the meaning of the Pharmacy Act. Although it places the decision on a different ground from that on which the Lord Chief Justice had gone in the Queen's Bench Division, still it seems to me that their decision is not necessarily inconsistent with the dicta of Lord Chief-Justice Cockburn in reference to several persons carrying on business together. I have looked closely to see whether the judgments of the Lords were in fact inconsistent with those statements of the law made by Lord Chief Justice Cockburn, and I have myself come to the conclusion that they are not, and that therefore, the words of the Lord Chief Justice being directly applicable to this case, unless I find those words are overruled by the opinions of the Lords in the Court of Appeal, I think I am bound to give effect to them, however much I may regret them, and however much one may have one's own opinion as to the justice of them. It was said by Lord Justice Cockburn, in words that seem to me directly applicable to this case, that all the partners really in a firm must be registered under the Act to make everything legal. And, that being so, I do not find myself justified in disregarding that decision. It will be open, of course, to the defendants to take it to the court above, but certainly I do not see my way to disregarding it. And it comes therefore to this—that there has been a sale of chlorodyne, which is admittedly a poison, and that, although Mr. Levy has the management of the department, and in every way, as appears to me, has as complete a management of it as a manager of a department in the Civil Service or other stores—yet simply because he has a partner named Cohen, who with himself is owner of the premises, who is one of the persons who keeps this business going, according to the decision of Lord Justice Cockburn they must both be registered; and as Mr. Cohen is not registered, he has committed an offence and must be fined. As against Mr. Levy, of course, the case is withdrawn. As against Mr. Cohen there must be judgment for the penalty of 5*l.*, with leave to appeal.

Mr. Grey: I should ask you to certify for counsel.

Mr. Sutton: Then if you do that, I ask for judgment on behalf of Mr. Levy, with certificate on his behalf.

The Judge: Well, I think that is the better way. Of course, as far as Mr. Levy is concerned he must have his costs. It will probably be better if I strike out the words ordering the summons in the plaint to be amended, and merely give judgment for the defendant; that would be the easiest way. You assent to that?

Mr. Grey: I am entirely in your Honour's hands.

The Judge: Of course, if you have any objection I must leave it as it is; but I must make it a term that he must have his costs.

Mr. Grey: Of course, if they had admitted that the two persons were the same we would never have proceeded against Mr. Levy; but they declined to do it.

The Judge: It is judgment for the plaintiff as against Cohen for 5*l.* and costs; plaintiff to pay defendant Levy's costs, certificate for counsel, with leave to appeal.

Mr. Sutton: You will also reserve me the point whether within Section 16 this was a sale of patent-medicine?

The Judge asked if it would do if he stated in his notes that the defendants raised the question whether chlorodyne was a patent-medicine within Section 16 of the Act.

Mr. Grey, while not opposing, pointed out that there was no evidence brought before his Honour that it was a patent-medicine.

The Judge: That is one of the difficulties of raising points after the case is closed.

Mr. Sutton: The label shows it was a proprietary medicine.

On the suggestion of the Judge, Mr. Levy was recalled, and stated that the bottles produced were some of those sold by him.

The Judge made a note of Mr. Sutton's point, and the case closed.

A CASE FOR THE PHARMACEUTICAL SOCIETY.

AT Marylebone Police Court, on Wednesday, Joseph Llewellyn, 39, described as a chemist, of 47 Malden Road, Kentish Town, but not on the register, was charged with having in his possession a small dispensing-scale which was false and unjust. A summons had been issued, the defendant did not appear, and he was arrested on a warrant. Mr. Newton asked the prisoner what authority he had for calling himself a chemist, and he answered that he did so from his apprenticeship. The prisoner seemed in a dazed state, and the Magistrate expressed a doubt whether he was in his right mind. Mr. Newton eventually fined him 5*l.* or one month, and directed that the attention of the Pharmaceutical Society be called to the case.

LABELLING LAUDANUM.

JOHN GEORGE HEBENDEN, trading as a chemist in High Street, Hartepleol, but not on the register, was charged, at Hartepleol Petty Sessions on June 13, with selling poison (laudanum) without labelling the bottle containing the same with his own name and address. It appeared that the police had taken up the case in consequence of representations made to the Corporation by the Pharmaceutical Society. Margaret Jackson said she went to defendant's shop on June 2 and asked for twopennyworth of laudanum, which was supplied in the bottle produced. Defendant said he told the girl he did not keep laudanum, but that he would get it for her. She called again, but he had forgotten to get it; and as he had a little in stock he supplied her, and having no labels of his own he used one of Jackson's, some of which happened to be in a drawer in the fixtures. He had purchased the fixtures from Jackson Brothers. Mr. Bell, who prosecuted, said the Pharmaceutical Society might proceed against defendant for selling poisons, he not being a registered retailer of the same. Defendant was fined 10*s.* and 16*s.* 6*d.* costs, or fourteen days.

INFRINGEMENT OF THE APOTHECARIES ACT.—SEVERE JUDICIAL CRITICISM.

ON Saturday last Mr. Justice Wright, sitting as an additional Judge of the Chancery Division, concluded the hearing of the case of *Alabone v. Morton*, but instead of giving judgment in favour of either plaintiff or defendant, his

Lordship commented severely on the conduct of both parties, stated that the case should be brought before the Public Prosecutor, and left either side to make a special motion for judgment if so advised. The case was a very peculiar one. The plaintiff, who was described as "Dr." Alabone, of Lynton House, Highbury, claimed an injunction to restrain the defendant from making use of professional information obtained while acting as confidential clerk to the plaintiff, and from pirating certain medical testimonials and prescriptions. It transpired in the course of the trial that the plaintiff had prepared and sold drugs and laid himself open to penalties under the Apothecaries Act.

In 1877 the plaintiff first published a book under the title, "Cure of Consumption," which has since run through several editions, and one part of the plaintiff's case was that after the defendant had left his service he also published a book, under the style of "Prevention and Cure of Consumption," in which book the defendant had inserted copies of testimonials that the plaintiff had received from his patients, as well as press notices which had appeared regarding the treatment of patients adopted by the plaintiff, and extracts of the particulars of cases taken from the plaintiff's case-book, all of which the plaintiff alleged the defendant had improperly obtained while in his employ. These documents, it was stated, had not been copied verbatim, but paraphrased so as to appear to refer to the defendant's book and treatment, but were not so much altered but that they could be identified with the originals.

The plaintiff was put upon the register of qualified medical practitioners in 1870, after examination and training at Guy's Hospital, and devoted himself specially to cases of consumption. In the year 1886 a complaint was made to the Medical Council with regard to an article in *Moonshine*, which the College authorities alleged to be an advertisement, and, as a consequence of that complaint, the plaintiff's name was removed from the register. According to the defendant's evidence, when the plaintiff was thus deprived of his qualification as a surgeon, he approached defendant, saying he was in fear of being prosecuted, asking the defendant to carry on the business under plaintiff's name, and, in the event of a prosecution, the defendant to be the person to be prosecuted. When the defendant gave this evidence, Mr. Justice Wright warned him that he was disclosing a criminal conspiracy, and the defendant replied that he was quite aware of the fact. The witness went on to say that some of the remedies used by Dr. Alabone were not his own recipes at all, and that the one known as the "Lacnanthe" remedy was given to him by a Mr. Trick. There was no such thing as "Lacnanthe" used in medicine, although a plant bearing the name was grown in Virginia. Many of the remedies were concocted by the defendant from his own recipes.

On Saturday last, the case having been adjourned for a week for his Lordship to consider what judgment he should give, the plaintiff was called into the witness-box to answer several questions put to him by the Judge with reference to the press notices and the composition of the "Lacnanthe" prescription. The journals quoted from in Dr. Alabone's book were the *St. Stephen's Review*, the *Christian World*, the *Guardian*, the *Echo*, the *Observer*, *John Bull*, the *Advertiser*, the *Whitehall* and *Court Journals*. Addressing witness, his Lordship asked him to turn to page 249 of his book, on which there was an extract from the *Guardian*, and he asked Dr. Alabone: Is that your composition?—No; not that I am aware of. What do you mean by that answer; did you write it or did you not?—I did not. Witness was understood to say that he might have read through and corrected the proof. Were any of these "opinions" paid for as advertisements?—No; but advertisements were to be given the paper on condition that a notice appeared. I also had the proofs to read. Do you mean to say that a paper like the *Guardian* makes that kind of bargain?—I cannot say; the *Echo* certainly did. Do you mean to say that that arrangement was made by the *Guardian*, the *Observer*, the *Echo*, and so forth—that these papers agreed to insert praises of your book if you would give them an advertisement?—I do not know about praises, but certainly notices of the book. Was any payment made to the *St. Stephen's Review*?—No; the only payment, if you can so call it, was the taking of a certain number of copies.

Mr. Justice Wright then questioned the witness as to whether any payment had been made to any of the other

papers, mentioning each one to the witness separately, and witness replied in each case that no payment had been made.

In answer to further examination, witness replied that he had never made any payment for any of the testimonials that appeared in his book.

Mr. Justice Wright then delivered his opinion of the case in the following words:—This is an action brought by the plaintiff to restrain the defendant from pirating certain medical testimonials and from dishonestly making use of professional information obtained by the defendant whilst acting as confidential clerk to the plaintiff, and from representing that certain so-called "Opinions of the Press" relating to the plaintiff relate to the defendant. The plaintiff is a person who was once qualified to practise as a surgeon, but who has been struck off the register. He, nevertheless, continues to practise as a surgeon. He also prescribes, prepares, and sells drugs for non-surgical purposes, thus subjecting himself to penalties under the Apothecaries Act. The defendant is a person who has never had any qualification, but who, having learned the business of preparing and selling these medicines from the plaintiff, is now a rival following it on his own account, with the addition that he represents some of the plaintiff's pretences to be his own property. He engaged with the plaintiff in what he admitted to be a criminal conspiracy to defeat the provisions of the Medical Acts and having been a party to the wholesale illegal supply of strychnine and other poisonous drugs. The plaintiff's book is designed to puff an alleged specific for consumption, which, it is not uncharitable to suppose, is inert if not injurious. It is recommended by so-called "Opinions of the Press," and by statements of cases of alleged cure, and by alleged testimonials from patients. The alleged "Opinions of the Press" have every appearance of being not independent opinions or real notices, but paid arranged notices, or advertisements. The alleged cases do not appear to correspond with the case-book from which they are said to have been taken. No doubt the alleged testimonials were in some cases written by patients in good faith, but many of them have a highly suspicious appearance and are suggestive of concoction or purchase. One of the strongest which I have read is from Isaac Hurn. This person was one of the two witnesses called to testify to the genuineness of the plaintiff's case. He admitted a letter which he did not wish very much alluded to. This one circumstance seems to me to go far to indicate that the suspicions aroused by a perusal of the plaintiff's book are well founded, and, when taken with the other admitted facts in relation to the plaintiff's business, obliges me to think that the business may probably be a cruel and nefarious system of obtaining money by false pretences from persons who are induced to believe themselves consumptive. If that is so the law will not lend its aid to protect a book published as part of such a scheme. The case is not at present carried beyond grave suspicion, but where ground for such suspicion exists I think the Court ought not to act blindfold. It was not to the interest of either party to assist justice in reference to these considerations, and I am unable to rely upon, or accept the evidence of, either party except to a very limited extent. There will, therefore, be further inquiry by the Official Solicitor and Public Prosecutor to ascertain of the newspapers whether these notices were paid for, or in any way, arranged. Either party may, if so advised, put the case in the paper for judgment on July 3. In the meantime all the books and papers will remain in my custody.

EVOLUTION IN TEETH.—They are teaching physiology in the London Board Schools, and the teacher, to test the knowledge of his class, asked a few questions. "What are the first teeth?" "Milk teeth," was the answer. "What are the next?" "Permanent teeth"; and "What are the last?" "False teeth," was the unexpected reply.

CAFFEINE occurs in small amount in cacao-beans, according to Schmidt (1883), theobromine being, as is well known, the principal alkaloid. The U.S. Department of Agriculture, in Division of Botany, has lately published descriptions of the *Ilex Cassine*, growing from Virginia to Texas, and used by the aborigines as a beverage on festal occasions. Professor E. P. Venable found it to contain—caffeine, 0.27 per cent.; tannins, 7.39 per cent.; total nitrogen, 0.73 per cent. This plant is another species of the maté.

Bankruptcies and Failures.

Re ARTHUR GEORGE RICKABY, Abingdon, Pharmaceutical Chemist.

THE debtor attended at the Oxford County Hall, on June 15, before the Deputy Registrar, for his examination. In reply to the Official Receiver, the debtor said he was about 41 years of age. He was brought up at Oxford, and went into business at Walton-on-the-Naze as a pharmaceutical chemist in 1877, with a capital of 300*l.*, given to him by his father. In 1888 he failed for about 600*l.* His creditors received 5*s.* in the pound, and the adjudication was annulled. In June, 1890, he started at Abingdon, with a capital of 300*l.*, derived from his father's estate. He kept a cash-book, day-book, ledger and banking-account. He executed a mortgage to Mr. Turpin in 1884 for 350*l.* That was still in existence, and he had paid the interest up to within the last year. In his statement of affairs he put down the value of the mortgage as of the same value as was lent on it—350*l.* He had not had a valuation. There was a mortgage also for 100*l.* to Mr. Sparling, solicitor. In February of this year he borrowed 50*l.* of Mr. Morland, his solicitor, giving security on a reversion, and he thought at that time he could have held on. He was married in 1879, and he had some furniture. His wife set up in an art-needlework business in 1883, having a showroom on his premises. In 1887 she purchased some furniture with her own money. He had furniture of his own to the value of about 50*l.*, and he insured the whole of it for 200*l.*, and the stock and fixtures for 300*l.* During the last three years he had made no profits from his business, and his expenses were not 200*l.* a year. Notwithstanding this, he thought he was solvent. He had bought a broken-down business, and he thought he might pull it up again. He was not aware that he had one hundred and fourteen creditors, one hundred of whom were for sums under 5*l.* each. The examination was adjourned until the July Court.

Re JNO. EVANS, Belmont House, Mumbles, near Swansea, Chemist.

THE examination of this debtor was held at the Town Hall, Swansea, on June 23. The following is a list of creditors:—

| | £ | s. | d. |
|--|-----|----|----|
| Clements & Co., Bristol | 21 | 14 | 0 |
| Crosse & Blackwell, London | 14 | 8 | 3 |
| Evans, Ben, Swansea | 115 | 17 | 0 |
| Evans, David, St. Clears | 75 | 0 | 0 |
| Evans, Lescher & Webb, London | 53 | 0 | 0 |
| Gilbey, W. & A., London | 11 | 6 | 3 |
| Home & Co., Bristol | 13 | 19 | 0 |
| Jones, James, & Son, Swansea | 19 | 12 | 10 |
| Lewis, Mrs. M. A., Cardigan | 15 | 0 | 0 |
| Maw, Son & Thomson, London | 75 | 8 | 1 |
| Meggison & Co., London | 11 | 8 | 6 |
| Phillips & Son, Swansea | 30 | 3 | 4 |
| Rees, Rev. George, Bolton | 15 | 0 | 0 |
| Sanger, Jno., & Sons, London | 31 | 1 | 3 |
| Silverlock, W. H., London | 16 | 7 | 4 |
| Smith, Leonard, Rhondda Valley | 40 | 0 | 0 |
| Swansea Gas Company, Swansea | 12 | 4 | 10 |
| York Glass Company, The, York | 19 | 3 | 2 |

(Total estimated debts, 686*l.* 5*s.* 6*d.*)

Re J. HUNTER WATTS, 39 Seething Lane, E.C., Chemist and Merchant, trading as J. Hunter Watts & Co.

THIS case came before Mr. Registrar Linklater, on Tuesday last, at the London Bankruptcy Court, it being in the list of the public examinations. The summary of accounts and the Official Receiver's observations on the case were issued the same morning to the creditors by Mr. Wildy, the Official Receiver in charge of the case. It appears therefrom that the liabilities amount to 437*l.* 19*s.* 1*d.*, and the assets are valued at sufficient to provide a surplus of 17*l.* 0*s.* 11*d.* The receiving-order was made on May 4 upon the petition of creditors. The debtor had been adjudged bankrupt in February, 1890, with liabilities 1,411*l.* 5*s.* 10*d.*, and assets *nil.* No dividend was paid. He has not obtained his discharge

under those proceedings. The bankrupt states that from 1889 to the date of the receiving-order he carried on business at 39 Seething Lane, London, as a commission merchant, under the style or firm of "J. Hunter Watts & Co.," but having no partner. He represents that he has no unsecured liabilities. The bankrupt attributes his insolvency to a judgment obtained against him by the petitioning creditors, whose claim is disputed, and his being unable from want of funds to lodge an appeal. No books of account have been produced. Creditors treated as "fully secured," amongst whom are the petitioning creditors, are stated to hold shares in two public companies. The bankrupt states that he has no furniture of his own, and is living in furnished apartments. Upon the case being called, the debtor applied for an adjournment to enable him to effect an amicable arrangement with his creditors, and to obtain an order for the annulment of the bankruptcy. The hearing was adjourned by consent of all parties for a month. The following are creditors, viz.:—

Fully Secured.

| | | | |
|--|-----|----|----|
| Sowerby, T., Bournemouth | 250 | 0 | 0 |
| Whitehead, Halsted & Chown, 23 Bucklers- | £ | s. | d. |
| bury, E.C. | 167 | 12 | 4 |

Preferential.

| | | | |
|--|----|---|---|
| McBlain & Fellman, 39 Seething Lane, E.C. .. | 11 | 5 | 0 |
|--|----|---|---|

Re MAURICE WILLIAMS, 27 Chancery Lane, W.C., Teacher of Chemistry.

THIS debtor filed his own petition at the London Bankruptcy Court, on June 15, and the usual receiving-order has now been made against his estate. It appears that he rented a shop of eleven rooms at the above address, being responsible for 315*l.* per annum to the landlord. The rooms were sublet to the School of Chemistry, but the debtor made no profit by the arrangement. The furniture in his own rooms is claimed by the wife's trustees under an ante-nuptial settlement, and the landlord has taken possession, the rent being 290*l.* in arrear. Nothing transpired with respect to the liabilities.

Re JOHN BLACK, Newcastle Street, Strand, Exhibition Promoter.

THIS debtor, the promoter of the recent Chemists' Exhibition, attended before Mr. Registrar Giffard, on Wednesday last, at the London Bankruptcy Court, for public examination. The accounts showed total liabilities 5,512*l.* 17*s.* 9*d.* (unsecured 5,458*l.* 18*s.* 3*d.*), and assets 177*l.* 15*s.* 6*d.* He was questioned by Mr. E. S. Grey, Assistant-Receiver, at some length, respecting the various exhibitions he had promoted, and stated that his failure was due to losses made in connection therewith and to pressure by creditors. At the rising of the Court debtor was being examined by creditors, and the sitting was adjourned.

Gazette.

PARTNERSHIP DISSOLVED.

Wood, H. B., and Harris, J. W., physicians, surgeons, apothecaries, and accoucheurs, Cranbrook, under the style of Wood & Harris.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATIONS.

Forster, John Erwood, Elham, doctor.

George, Frederick, Chipping Norton, doctor of medicine and surgeon.

Hamilton, Adam, Worcester, late of Arnley, Leeds, physician and surgeon.

Hughes, Robert Jaffray, Queen's Road, Wimbledon, S.W., physician and surgeon.

Irvine, R. J., York Street, Baker Street, W., doctor of medicine.

Toope, Theodore Charles, Knaresborough, veterinary surgeon.

Westmoreland, William Henry, St. Helen's Terrace, North Kensington, chemist.

Williams, Maurice, Chancery Lane, W.C., teacher of chemistry.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Bates, Henry Baker, St. Helen's Junction, Lancashire, physician and surgeon—bankrupt discharged.

NOTICE.

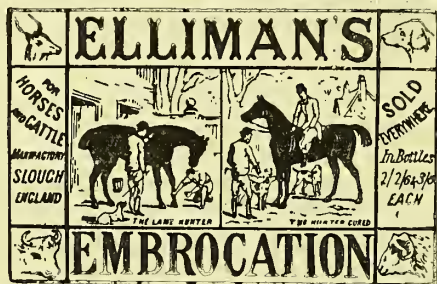
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THE OLDEST ENGLISH & AMERICAN CHEMIST
in PARIS (founded 1808)

BOISSY late GALLOIS
2, Place Vendôme, Corner of rue St-Honoré
would undertake one or two additional
agencies for patent Medicines, Sundries, etc.
Special connexion amongst Doctors
in Paris & Provinces.

The Practitioner.

"WE have subjected FLETCHER'S CONCENTRATED LIQUORS to a prolonged test, and we are able to report that, when diluted according to the directions given, THE RESULTING TINCTURES, &c., ARE INDISTINGUISHABLE IN STRENGTH, APPEARANCE, AND EFFICACY FROM THE OFFICIAL PREPARATIONS."

EAST INDIAN OPIUM AT THE LONDON DRUG-SALES.

In our Trade Report we refer to the inclusion in this week's drug-auctions of a parcel of 20 cases of East Indian opium, the first consignment of that variety of the drug which has ever (or at any rate within the memory of the present generation of druggists) been offered at a London drug-sale. The causes that led to the placing in auction of this particular parcel are sufficiently singular to deserve a place in the

chronicles of the drug-trade, and we therefore propose to refer to them briefly. These 20 cases (if our information concerning their history is correct) formed part of a shipment of 684 cases forwarded in March last from Calcutta to China, where almost the entire production of Indian opium finds an outlet. The steamer *Niemen*, in which the opium was shipped, foundered off the coast of Ceylon, but after having spent some time under the water the greater part (nearly 600 cases) of the opium consignment was recovered and brought ashore off Galle. The entire parcel had been insured for 60,000*l.*, or at the rate of about 11*s.* per lb., which is probably quite as much as the drug was worth at the time of shipment. The underwriters, into whose possession the salvage passed, sent 40 cases to Hong-Kong, where, we are told, they realised about 5*s.* 6*d.* per lb., or half their insured value. Meanwhile, the opium-markets in Turkey and England had risen very considerably, and the underwriters thereupon decided to try whether London would not afford them a more favourable opportunity for disposing of their wares than Hong-Kong. They therefore sent over a trial shipment of 50 cases, of which a portion was tentatively offered at this week's auctions, the remaining 520, or thereabouts, being meanwhile warehoused in Ceylon (so the story goes), to be dumped down upon the British market if the omens should be favourable.

It is but natural that the principal London operators in opium, who are mostly believed to be strongly upon the "bull" side of the market, and whose anticipations of a further advance in price, in consequence of the threatened shortness of the crop, seem to be in a fair way towards realisation, are not at all pleased at the prospect of the introduction of such a disturbing factor in their calculations as would be created by the placing upon the market of some 500 to 600 cases of Patna opium, possibly for sale "without reserve." On the other hand, this East Indian opium is notoriously of a very low morphia-percentage, and, in fact, counts for little more than half of the same bulk of good Turkish manufacturing-opium so far as its intrinsic value is concerned. Apart from this, morphia-makers have never been in the habit of using it, and would therefore be chary of paying anything like the full alkaloidal value for a drug which might cost as much, or more, in working-expenses as the varieties they are accustomed to handle, while yielding little more than half the return.

There are probably not many among the druggists who inspected the heavy balls of this dark-brown, treacly opium at the brokers' showroom to whom this variety was at all familiar. The balls are very damp, and are wrapped in layers of poppy-leaves and chopped stalks about $\frac{3}{4}$ inch in thickness, and constituting, perhaps, 6 to 7 per cent. of the total weight. Each case of the drug contains forty balls weighing a little over 4 lbs. each, and declared to test 6.3 per cent. of morphia. This test is rather above the average of Patna opium, which does not generally exceed 6 per cent. in morphia-yield. The moistness of the sample shown in Mincing Lane was generally attributed to the circumstance that the drug had been damaged by water, though the appearance of the leaf covering the cakes was scarcely consistent with that view. It appears more likely that the moisture is simply due to the difference in the manufacture of the Indian as compared with the Turkish drug, and is the normal condition of Indian Government opium, in which, as it is only intended for smoking, no high morphia-percentage is needed.

It may be that in the far future Indian opium will become a recognised article of trade in this country, and if the Indian Government should see fit to introduce improvements

in its mode of manufacture, as Mr. E. M. Holmes and others have advocated, there seems to be no reason why in course of time it should not compete upon our markets with the Turkish and Persian drug. It is by no means certain yet whether the low percentage of morphia in the Indian opium is the result of want of care in the collection, or of a natural deficiency in the juice of the Indian poppy; but there are indications that the former is the case, for, as Flückiger has observed, narcotine, which is much less easily decomposed than morphine, is often found in East Indian opium in abnormal proportions as compared with the latter alkaloid—a fact from which it has been argued that part of the morphine is destroyed in certain stages of the manufacturing process.

"VETERINARY" CHEMIST.

WE quote the following article from the *Veterinary Record* of last Saturday (June 17). It exhibits a rather indefinite state of mind:—

The short report we reprint from the *Times* shows that our appeal was unsuccessful, and that the judgment given permits anyone to call himself a "veterinary" chemist. This decision does not decide the matter, and we trust the Council will, at the earliest opportunity, again endeavour to establish our sole right to the word "veterinary." This is really what we want, what we have a moral right to, and what we believe the Act of 1881 gives us. We coined the word when the Veterinary College was founded at Camden Town. We were "distinguished" by that title in the Royal Charter of 1844. We were protected in its use by the Act of Parliament of 1881.

The veterinary profession is making no attempt to prevent chemists from selling medicines. "Horse and cattle medicines" is a common enough notice in the shop-windows of provincial chemists. It is an honest and fair notice; every one knows what it means. When a man who has not studied "veterinary" science adopts the word to describe his business, he must have some motive for doing so, and we can only think that his desire is to imply that he possesses special veterinary skill.

The *Times* report gives a very fair summary of the judgment pronounced by Justice Day, but the arguments of Mr. Poland, Q.C., are not even noticed—and no wonder. We happened to be in court, and we certainly never remember to have heard a counsel so weak in argument, and so perfunctory in his efforts. The impression given was that of a man who had quite made up his mind that he had no case, and who wished he were otherwise employed. This is not the spirit in which to win anything; and if our counsel had no confidence in his case, we had better have employed someone who had, or who was able to simulate confidence.

The judges seemed to lay special stress upon the fact that the chemist in this case only sold drugs for animals, or as Justice Day three or four times sneeringly put it, "powders for pigs." They seemed impressed with the fact that he did not prescribe for special cases, and, therefore, had not assumed any special knowledge. Next time we go into court we must have a stronger case—one where the defendant assumes our title and practises our art. Such cases, no doubt, can be found, and we shall then, even before the same judges, have every chance of success.

"What we want," says Mr. Hunting's journal, "is the sole right to the word 'Veterinary.'" The *naïveté* of this confession is its principal attraction. A great many of us find that what we want and what we get are not quite commensurate, and, as a rule, we do not parade the discovery. Nor is it very dignified for our friends to charge their failure on Mr. Poland. Do they imagine he would have fared any better if he had boldly and nakedly declared "what we want?" He was asked by the judges if he was disposed to rest his case on such a contention, and he lacked the nerve, which, perhaps, the editor of the *Veterinary Record* would

have manifested, to submit definitely such a hopeless claim. He did his best to insinuate it; it wouldn't wash on that occasion.

This absurd claim, and the unreasonable irritation against their counsel for not succeeding in fogging the judges, which characterise the greater part of the article we have quoted, scarcely prepare us for the flash of common sense in which the note concludes. "Next time we go into court we must have a stronger case." You certainly must, Mr. R.C.V.S., if you want to save your money; it was the case, not the counsel, that you were upset on lately.

OPINIONS OF THE PRESS.

MR. JUSTICE WRIGHT did a great service to the better section of the press, and still more to the suffering portion of the public, by his judgment in the case of *Alabone v. Morton*, last Saturday. The admitted facts in the case tried were miserable and sordid enough. The plaintiff had been a physician whose name had been struck off the Medical Register. He employed an unqualified assistant, who helped him in his advertising business, and who, as the defendant in this case, disclosed, as the Judge said, a criminal conspiracy on his part with the plaintiff to enable the latter to defy the law. The two beauties quarrelled, and Morton set up as a consumption curer in opposition to his quondam master. It does not seem to have been disputed that Morton pirated the press notices which Alabone had more or less directly bought. Alabone appealed to the law to stop this piracy, and perhaps in strict law he could have claimed an injunction. But this time the court of law turned out to be a court of justice, and the judge sternly refused to grant the relief asked for. It is not to the interest of either plaintiff or defendant, he said, to help the Court to an exact knowledge of the facts; but if, as seemed probable, the method of business disclosed was "a cruel and nefarious system of obtaining money by false pretences from persons who are induced to believe themselves consumptive," the law would not lend its aid to any part of such a scheme. If either party wants judgment, let him come and ask for it, and the Court will order an investigation to be made as to the means by which the testimonials and press notices in question were obtained. This judgment leaves it an open question whether the plaintiff or the defendant is the more deserving of our sympathy; but it leaves very little room for respect for those newspapers named which do not take prompt means of clearing themselves of the implication which the Judge's charge conveys. It is simply that they, rich properties as many of them are, were willing to sell their influence to a man who came along with an order for advertisements, and, for anything they could tell to the contrary—for they could know nothing of the virtues of the medicine puffed—to betray, for the profit thus offered to them, the trust of the most helpless of their readers. Certain newspapers are fond of vaingloriously declaring the power and influence of the press; it is monstrous that those who believe this should fail to realise that such power and influence involve responsibilities which it is disgraceful to ignore.

"CORNER FOR STUDENTS" COMPETITION.

We have gone carefully through the reports sent in by competitors during the past six months, and find that the prize has fallen to Mr. H. Bowden, of Gorsefield, Patricroft, Manchester, who has obtained an aggregate of 553 marks being seven marks, less than the number obtained by the first prizeman for the six months ending December last. Mr. J. H. Matthews follows him with 548 marks; and Mr. S. R. Powell is a good third at 547. H. F. and Zymine

are close up to the leaders. Mr. Bowden is entitled to a copy of Mendeleef's "Chemistry" or Fresenius's "Analysis," and to him and to the second and third in the tournament we shall forward certificates on hearing from them.

POINTS FOR THE HIGH COURT.

The question of the exclusive right of chemists to sell proprietary medicines is still, to some extent, an open one, though the cases reported this week seem likely to bring it near a solution. There is, it seems, a probability that the exemption of patent medicines will be raised in Ireland in respect of the sale of Kay's Essence. Two other appeals from the decision of the County Court judge at Manchester, which have been notified, raise other points. In the first the question involved is whether the presence of any quantity of poison, no matter how small, is to be held to render the compound containing it a poison within the meaning of the Act. It will be remembered that the judges in the chlorodyne case carefully guarded their judgment to apply only to the preparation then before them. It is for another Court to say whether any line is to be drawn, and, if so, where. The other case, respecting which notice of appeal has been given, turns mainly on the doubt whether an unqualified person can be a partner with a qualified person in the business of keeping open shop for the sale of poisons. High Court decisions on these several points will be of extreme importance in regard to the differentiation of the chemist's from other businesses.

GROCERS AND CHEMISTS.

A grocer, writing to his trade organ, comments on the strained relationships between chemists and grocers, and frankly enough points out that one prominent cause of chemists and others taking up the sale of packet teas, for instance, may be that many grocers are more ready to sell the articles of another trade at cost price, or a very little over—presumably as an advertisement—than they are to devote their energies and capital to their legitimate business. The moral, we presume, is that we should let bygones be bygones, and behave more chivalrously towards each other in the future. The appeal would have been more graceful—and, so far as chemists are concerned, more effective—if it had been made a few years earlier. The grocers, having found their weapons seriously damaged in recent encounters, are not exactly justified in naming their terms for peace.

OUR "LITTLE NIPPER."

We never fully realised the dramatic intensity of truth to human nature in Mr. Chevalier's song about the precocious youngster whose "funny little, ikey little ways" were at once the delight and the despair of an indulgent parent until, last week, we received the May issue of our Melbourne offspring. For there, with that bold absence of all feelings of reverence which our maturer age and experience would have inspired in a nursling reared in a mellow and deeper-grafted civilisation, our Australian journal ventures to give us what is called "a piece of its mind" on our temerity in questioning the policy of the Ontario College of Pharmacy, which proposes to withdraw the validity of British pharmaceutical qualifications in Canada, because Britain does not recognise Canadian certificates. Our irate youngster, putting in a chubby little fist to defend its Canadian sister, calls our remonstrance with Quebec "an excellent specimen of the calm, cool assumption of superiority which seems one of the essential features of the British character, and therefore, we presume, something to be proud of." We really felt inclined at first to chide our little one seriously for this act of insubordination, but pride in our child's youthful vigour quickly overcame the sterner feelings of our heart. No; we are not angry—we are not even grieved. In fact, we rather feel some secret satisfaction at the workmanlike manner in which this eight-year-old "kid" spars up to its parent.

There is promise of a bright career in this intrepidity from a youngster which as yet "only stands about so high, that's all."

THE "INVINCIBLE STUPIDITY" OF THE BOARD OF INLAND REVENUE.

This week's *Truth* has an article on Inland Revenue proceedings which will gladden the sore hearts of those of our friends who are smarting under the imposition of medicine-stamp penalties. It is genially headed "Wooden Heads at 5,000*l.* a year," and, though it does not deal with the druggist's perennial grievance, it will remind some pharmaceutical readers of their own correspondence. It relates how a Mr. W., of Croydon, who rented a house at 60*l.*, and finding himself assessed at 75*l.*, wrote to the Board for redress, and, as evidence, submitted a copy of his agreement with his landlord. An official reply, signed by Mr. W. H. Cousins, secretary, was sent, not dealing with the over-assessment at all, but pointing out with the utmost solemnity that the document was subject to a 7*s.* 6*d.* stamp, and that a penalty of 10*l.* was now exigible. Mr. W. was asked what explanation he had to offer. Mr. W.'s explanation was, of course, the simple one that the document he had sent was not the lease, but a copy of it. Still the official mind clung to its first impression. The Board insisted it was the original, and they talked about proceedings. Mr. W., in reply, asked them to return his document and reduce his assessment. The Board seemed to be getting a little light, and magnanimously offered to say no more about it if he would remit 7*s.* 6*d.* and a receipt for 10*l.* "as for a repayment of penalty." The ultimate result was, of course, that Mr. W. got his way; and in considering how to explain their conduct *Truth* canvasses several theories, but comes to the conclusion that it was "a display of invincible stupidity," and asks Mr. Milner, the Chairman of the Board, "whether it is tolerable that an innocent law-abiding citizen should be harried and threatened in this way, for the purpose of extorting money from him, by public servants whom he and the rest of us remunerate on such a lavish scale?"

ATROPINE IN CHOLERA.

At the last meeting of the Royal Medical and Chirurgical Society, Dr. Lauder Brunton communicated a note on the treatment of cholera by atropine. It is well known that the fatal symptoms of cholera bear a close resemblance to those of muscarine-poisoning, and it occurred to Dr. Brunton that they might be treated in the same way—namely, that atropine, the physiological antidote to muscarine, might also prove the antidote to the cholera poison. A few months ago Dr. Brunton had an opportunity of putting this idea to the test. A patient from Hamburg came under his care while suffering from all the symptoms of the collapse stage of cholera. Atropine was administered hypodermically, and the patient rapidly revived. After a little, however, the collapse again set in. The atropine was repeated, and once more the symptoms passed off, and the case completely recovered.

It would be unwise to be sanguine from success in a single case. But the theory on which Dr. Brunton's idea is based seems to be not only ingenious but reasonable.

GLYCERINATED VACCINAL LYMPH.

Anti-vaccinators have two main lines of argument. They hold, first, that the vaccine does no good against smallpox; and, second, that it does a lot of harm. Orthodox vaccinators have to recognise that there is some basis for the second charge; and, to do them justice, it may be admitted that they are trying to set their house in order. Dr. Copeman has been making a series of experiments lately on the bacteriology of vaccine lymph. It seems that the lymph

ordinarily used contains many kinds of micro-organisms, and sometimes these are of great virulence, as the microbes of suppuration and erysipelas. The organisms are more numerous in old lymph which has become opaque; in fact, the opacity is caused by the colonies of bacteria. Comment on these statements seems almost needless; and we can only wonder that bad results do not more frequently follow vaccination, and insist on the importance of a supply of lymph free from such dangers. Dr. Copeman believes that the best way to secure the sterilisation of vaccine lymph is to mix it with a certain proportion of glycerine. The glycerine slowly kills out all the bacteria, while it in no way affects the active properties of the vaccine. Indeed, the lymph is said to be increased in activity by the addition of glycerine, for so long as the micro-organisms are present they neutralise the protective principle, and in time completely destroy it. The glycerinated lymph is thus free from danger of conveying microbial diseases, and it keeps at a constant strength for long periods. These are certainly important advantages, and should be sufficient to secure a full and fair trial for the lymph so prepared.

TEMPERATURE AND ROTATORY POWER.—M. Aignan has recently studied the action of temperature upon the rotatory power of liquids. A mixture of *lævo*-rotatory turpentine and *dextro*-rotatory camphor was dissolved in benzene, and it was observed that the mixture changed from negative to positive at a temperature between 61° and 73° C. for red light, between 13° and 33° C. for yellow light, and was positive for all the temperatures for green light, the angle of rotation being 2° 24' at 13°, and 6° 43' at 90° C.

THEFT FROM EMPLOYERS.—On June 20, at Derby, Edwin Forrest, lately a porter in the employ of Messrs. Boot & Co., chemists, was brought up on remand charged with stealing on April 11, the sum of 8*l.* 2*s.* 2*d.*, the moneys of his employers. The prisoner was engaged on April 3, at weekly wages, and had a good character with him. On April 8, the manager handed him a parcel containing 8*l.* 2*s.* 2*d.* to take to the London Road shop. Instead of taking it he disappeared. Prisoner pleaded guilty, and said he had had a lot of trouble to put up with. He had always up to now borne a good character, and had occupied a good position. The Bench committed him to prison for three months' hard labour.

A CHEMICAL BARONET'S POETRY.—Sir Charles A. Cameron, the Medical Officer of Health for Dublin, and well known as an analytical chemist, having written to Sir Charles Cameron, M.P., a letter congratulating him as his "dear alter ego" upon his elevation to the baronetage, and suggesting that there might again be confusion about the two Charles Camerons, the hon. baronet has addressed to him the following reply, and the *British Medical Journal* has secured it for the world:—

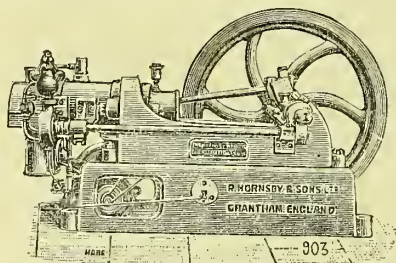
Sir Charles Cameron to Sir Charles A. Cameron.

My "alter ego," you say true,
How shall I know myself from you?
Perplexed to verge of mind-paralysis
Let us fall back on an analysis,
Though you have changed the old notation
I still can work out an equation.
C. A. C. you; C. C. am I,
We'll get th' equation by and by;
Oh! Thrice O plus Ca, plus C.
Should work out Ca CO₃.
In my case add the O four times,
To suit requirement of rhymes,
Twice C plus four time O, that's true,
Equals, of course, twice CO₂.
Now this explains, as you well know,
Your rooted hate for H₂ O;
And why it makes one "thick of spache"
—Your strong C₂ H₄ OH
Which only suits my temper placid
In water and carbonic acid.
These differences set down at random
Exist—*Quod erat demonstrandum*,
For, Alter Ego, Clansman, Brother,
If you're a chemist, I'm another.

THE ROYAL AGRICULTURAL SHOW, CHESTER.

THE fifty-fourth annual exhibition held by the Royal Agricultural Society was opened at Chester on Saturday last, being characterised by excessively hot and summer-like weather, and when the representative of THE CHEMIST AND DRUGGIST attended on Monday, the show-ground was a bright picture, under the light of a burning sun, from early morn till evening. What we may term the chemical and chemists and druggists' section of agriculture was well represented, most of the well-known houses exhibiting their products in, for the most part, commodious and excellently-arranged stands, some of which approached the artistic in point of design, architecture, and general effectiveness. A few of the firms complained somewhat of the rather indifferent position allotted to them on the ground, and, having regard to the relative attractiveness of the stands, such firms as Day & Sons and R. Ellis & Son might with advantage have been given a better position. Perhaps a little wholesome agitation on the part of the aggrieved firms may set matters right in future years.

The first stand we visited on our tour of inspection was that of R. HORNSBY & SONS (LIMITED), of Grantham, who occupy a considerable space and make an attractive display in the machinery-in-motion department. The "Hornshy-Akroyd" patent safety oil-engine is shown in six sizes,



ranging from $1\frac{1}{2}$ to 16 actual or brake horse-power. It uses oil of a heavier (and, therefore, cheaper and safer) description than any other oil-engine. It is very easily started, taking only about four or five minutes to heat up the vaporiser, and when that has been done no further igniting arrangements are necessary. The cost of working of the larger sizes is less than one halfpenny per brake horse-power per hour, and this is only very slightly exceeded in the small sizes. This machine should prove useful to manufacturing chemists and aerated-water manufacturers, the more so that the makers claim for it that it can be run more economically than one driven by gas, and is in every respect as good.

Messrs. TANGYES (LIMITED), of Birmingham, were in a fine position on the ground, and made full use of it, displaying a large number of their celebrated gas-engines (Pinkney's patent). These are made in sizes varying from one-half to 115 horse-power. Lately, improvements have been added which make these engines exceedingly economical when run at high speeds, and we understand that a large trade has been done in them.

At the stand of E. S. HINDLEY, of Bourton, Dorset, were to be seen numerous exhibits, among them being a vertical steam-engine from 1 to 4 horse-power, a vertical hoisting-engine of 3-horse power, and horizontal engines of 3 and 8 horse-power, the former with vertical-tube boiler, and the latter on cast-iron base. PRIESTMAN BROTHERS (LIMITED), of Holderness Foundry, Hull, again showed the 20-horse power oil-engine which obtained a prize at the show of 1888, and two other oil-engines, of 2 and 7 horse-power respectively, which have also obtained awards in past years.

Messrs. CROSSLEY BROTHERS (LIMITED), of Manchester, also exhibited their "Otto" horizontal and vertical engines, from one-half up to 25-horse-power nominal, and their patent petroleum oil engines of $6\frac{1}{2}$ and 13-horse-power respectively.

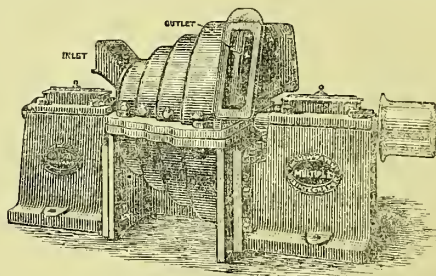
Messrs. J. HARRISON CARTER'S Magnetic Separator and Feeder, attracted a considerable amount of notice. It will feed evenly any quantity from 5 cwt. to 3 tons per hour, at the same time separating perfectly any particles of iron and steel, by means of a strong magnet, sufficiently powerful to hold a weight of 7 lbs. of metal. The machine was shown

at work grinding linseed, locust-beans, horax, soda, and other materials sent in by intending purchasers. Attached to the machine was a useful halloon of canvas-like material, for collecting dust; this appendage the makers also supply. This firm also show a sieving separator, intended to imitate as nearly as possible the action given to a hand-sieve.

Messrs. JOHN H. LADD & Co., of 16 Queen Victoria Street, London, E.C., showed some of their perpetual presses for steam and horse power for baling fibres, hay, and straw. This firm manufacture all kinds of hydraulic presses.

The CENTRAL CYCLONE COMPANY (LIMITED) exhibited their "Cyclone Pulverizer," which they recommend on account of its extreme simplicity, capability for fine grinding, and absence of clogging. The machine is supplied with automatic feeding-apparatus, separating hood-exhauster, and automatic oiling-devices.

The new patent "Multiple" disintegrator, which the HARDY PATENT PICK COMPANY expect to prove a success, is described as the best and simplest machine for producing fine and impalpable powders from fibrous, friable, or moist



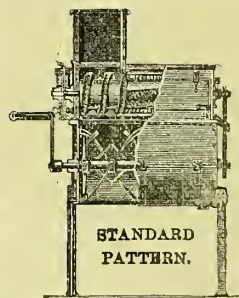
materials. When we visited the Exhibition the proprietors were running through a parcel of fuller's earth, and the good opinion of the makers was fully upheld by the resultant powder coming through in an absolutely impalpable condition. We were also shown samples, ground by the makers, of barytes, soda, brown-sugar, horax, &c., as fine as the best flour. The Company claim this as an entirely new departure in grinding-machinery.

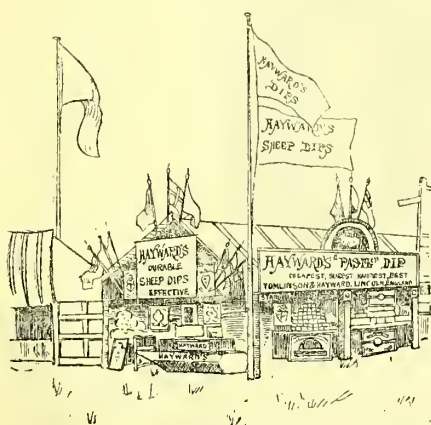
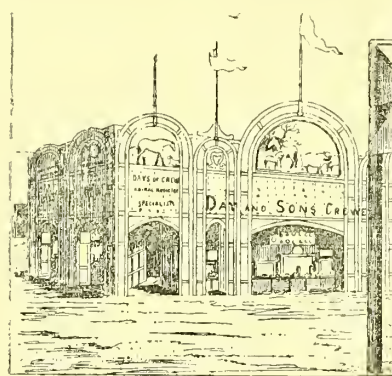
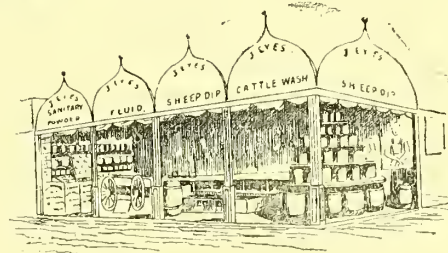
WILLIAM GARDNER'S (Gloucester) "Indispensable" sifter and mixer is quite a different machine to any they have hitherto produced. It is made in two sizes, and by means of a series of brushes arranged in helical shape in the interior of the top part of the machine, the smaller size can sift 7 lbs. of material in about twenty seconds. The sieve is so fixed also as to be easily removed whole or in sections in case of wearing out.

For chemists' use they also show a "Rapid" mixing-machine alone, and a sifting-machine, under the same well-known cognomen, for sifting alone. Another machine by the firm is a centrifugal dresser for powders through very fine meshes, largely in use for flour, blacklead, paints, colours, dry-salteries, sulphur, and dyes.

Messrs. ARNOLD & SONS, veterinary-instrument makers of West Smithfield, London, displayed all varieties of their specialities.

Messrs. R. ELLIS & SON, of Ruthin, had a remarkably pretty arrangement of rockery, ferns, and palms interspersed with syphon-waters of the firm's make. This attracted no little attention, and had a pleasantly cooling effect with the thermometer standing at over 80° in the shade. For their soda-water Messrs. Ellis claim that each bottle invariably contains 15 grains of bicarbonate of soda; lithia-water, 3 grains; and lithia and potass, 3 grains of lithia and 15 grains of bicarbonate of potash. Seltzer-water is also a leading product of theirs, and they publish a very satisfactory analysis of this by a noted water-analyst. This firm also put up a quinine-tonic water, champagne lemonade, and the usual aerated-waters, which, it may be noted, were in use at the





SKETCHES FROM THE ROYAL AGRICULTURAL SHOW.

Royal and other pavilions on the show-ground. Messrs. Ellis are at present busily engaged enlarging their works at Ruthin, owing to an ever-increasing trade.

SPRATT'S PATENT (LIMITED) were well represented by a colonnade stand, the front of which was surmounted by three of the famous dog-biscuits of colossal size. They were also displaying a new dog-soap of improved quality, and a special wheat-meal biscuit for pet-dogs, which they have lately introduced. The latter are put up in 14-lb. tins, to be sold at the same price as the ordinary pet-dog biscuits. Samples of dog-cakes and biscuits, and poultry and pheasant foods, for which this firm are noted, were also shown, and which have, we were told, an ever-increasing sale.

In this part of the ground, also, we visited Messrs. DAY, SON & HEWETT, and our attention was attracted to their stockbreeder's medicine-chests, put up in three sizes, and containing a complete assortment of medicines for the treatment of stock, with a "Key to Farriery." A preventive for fever, tapeworms, husk, or loose and scour, or diarrhoea attacking ewes and lambs is the "Teanoline" powder, which the firm put up in tin cases to be sold at from half a guinea upwards. They are also manufacturing now a special cleansing drench for mares, cows, and ewes. The "Kosso-lian" salt, for conditioning and blood-purifying, and No. 2 of the same article, for prevention and cure of fluke in cattle and sheep, is another preparation of this house, who also show the "Porcino" pig-powder for swine-fever, colds, debility, influenza, and like ailments.

The chief feature of the JEYES' SANITARY COMPOUNDS COMPANY was a new sheep-dipping arrangement. The firm's stand, however, being a corner one in a prominent position, a fine display of all their well known preparations was also made. We noticed, besides, the "Fluid," animal and dog soap, veterinary ointment, foot-rot ointment, sanitary powder, and disinfectant sawdust. The firm are also in evidence by their household, disinfectant, toilet, shaving, and poultry soaps. The "Perfect Purifier" is sold in a highly-concentrated form, and will bear dilution to the extent of 1 part in 100 of water, at least, to make a strong disinfectant solution. The non-poisonous sheep-dip also found a prominent place in the exhibit.

Messrs. DAY & SONS, of Crewe, had one of the prettiest and most effective stands in the show, and it might well have been given a better position by the executive. The panels adorning the front were each decorated with a rich painting, of large size, from the brush of Mr. Oliver Thomas, of Bourne-mouth, the general design of the stand being the work of the firm's architect at Manchester. The most popular of Messrs. Day & Sons' special lines were prominent, and our attention was particularly drawn to their "Black Drink," for the cure of colic or gripes in horses, and similar evils in cattle and sheep; "Red Drink" for bad cleansing after calving, and preventive for milk fever and inflammation, &c.; "Purified Driffield Oils," for healing wounds, cuts, and bruises, and for dressing in difficult lambing or calving, and "White Oils," for bruises, sprains and swellings. The *chef d'œuvre* of the exhibit, however, would probably be the "Original" Horsekeeper's Medicine-chest, arranged specially for disorders of horses, with guide to "Everyday Farriery." These are made in three sizes, and are very compactly arranged. A small sample chest is also sent out by this firm.

In close proximity Messrs. NEWTON, CHAMBERS & Co., of the Thorncliffe Works, near Sheffield, had secured a corner space, and had a very well-arranged exhibit, prominence being given to the now well-known "Izal" disinfectant, the non-poisonous properties of which the firm's representative was quite willing to demonstrate personally on the spot. This firm also made a good show of their "Noxana" sheep-dip, chicken-meal, medicines for poultry or pheasants, and dog-medicines of every description. We also noticed "Fibrine" meat, fish and meat, and meat and vegetable dog-cakes, and cod-liver-oil cakes for dogs. The extraordinary business which this firm carry on in many lines will be more readily understood when we mention the fact which their representative imparted to us with pardonable pride, that their works and collieries cover seven miles of ground.

Cupiss' constitution-balls for horses and sheep, and for neat cattle, and cough-balls for horses, were effectively shown by Messrs. CUPISS, of Diss, Norfolk.

HENRI'S PATENT CATTLE FEED COMPANY, of Northumberland Avenue, exhibited their Arabian medicated horse con-

dition powders, patent calf-rearing feed, spiced feed, and pure spice for seeds and roots.

The BOVINE FOODS COMPANY, Pocock Street, Blackfriars, E.C., also exhibited horse, cattle, calf, and pig food, and the Bovine hay-spice.

Thorley's food for cattle (for sale in cases or bags), calf-meal, hay spice specially prepared for mixing with hay at time of stacking, feeding-cakes, lamb-food, and soft food for pigeons, were all shown at the stand of Mr. JOSEPH THORLEY, of King's Cross, London.

Messrs. TOMLINSON & HAYWARD, of Lincoln, had secured a good corner stand, and were exhibiting their various sheep-dipping preparations, cattle-oils, weed-killers, lambing oils, butter-powder, essence of rennet, and other goods. Special attention was drawn to their Yellow Paste dip, which they are now bringing prominently forward. This paste will mix with cold water, and is certainly one of the handiest forms of sulphur-dips. Eureka weed-killer was also shown in highly-concentrated form, one gallon of it being sufficient for use with 50 gallons of water. Messrs. MORRIS, LITTLE & SON, of Doncaster, displayed their different specialities, among which may be mentioned their fluid and powder sheep-dips, maggot-wash, fly-powder, disinfectant, phenale, sanitary-powder, and dog-soap. Mr. JOHN W. DENNIS, of Louth, Lincoln, showed pig-powders, and carotene butter-colouring; and Messrs. B. CANNON & Co. (LIMITED) exhibited their sheep-dip and dipping machine.

The STOTT FERTILIZER AND INSECTICIDE DISTRIBUTOR COMPANY had a good exhibit of their Killmright insecticide, and other preparations of a like nature. The LAWES' CHEMICAL MANURE COMPANY (LIMITED), of Mark Lane, London, show their improved non-poisonous fluid-dip, which mixes instantly with cold water, leaving no sediment; 1 gallon of the dip is mixed with 100 gallons of water. Another production of the firm is a powder-dip, sold in 1s. packets for dipping twenty-five sheep, and 3s. ditto for ninety sheep. Lawes' Disinfecting Fluid for general medical and household use and for domestic animals was also in evidence.

A new patent ice-freezer is one of the latest productions of Messrs. SPONG & Co., of 226 High Holborn, London. The



machine is in shape like a large hand-syringe, with a nickel tube varying from twelve to fifteen inches in length, to hold from half-a-pint to one quart of liquid. Water or milk is poured into the cylinder, which is made air-tight by means of a small screw-valve; the cylinder is then placed in a tub of ice and salt or chemical freezing compound, and in from five to ten minutes, according to the size of the machine, a solid

block of pure ice is produced. Messrs. Spong & Co.'s representative demonstrated this to us on Monday last, and the result of experiments with water and milk were most successful. The makers recommend the freezer as being especially useful to the medical profession and in households and hospitals. It is made in four sizes, and sells at a very moderate price.

Soon after noon on Monday, the stand covering Messrs. R. Hornsby & Sons' exhibit was found to be on fire. The canvas was soon fully alight, but the energetic action of the employés and the Show fire-brigade prevented any spread of the fire, and serious damage was obviated. The stall was roofed in, and the exhibit presented almost its normal appearance at the end of the day. The fire originated amongst some waste material at the rear of the stand.

THE CHEMICAL SOCIETY.

THE meeting of Thursday, June 15, was notable for more than one reason. In the first place, it was the last of the session, and a good deal had to be got through in order to clear up accumulations of work. No fewer than seven papers were disposed of, three, at least, of more than average interest. The attendance was good, but discussion was not proportionately lively owing to the severe strain upon the time made by reading, even in abstract, the papers, which were preceded by balloting for new members.

THE ACONITE RESEARCH

supplied the first two communications. Professor DUNSTAN and Mr. F. H. CARR, dealing with the "Conversion of Aconitine into Isaconitine," premised that aconitine hydrobromide when heated (in solution) was converted into the non-poisonous isaconitine hydrobromide, especially in the presence of 10 per cent. of the free acid. The actual occurrence of this conversion was established in various ways—*e.g.*, by the determination of the melting-points or by the interaction of the two bases with auric chloride. Aconitine yielded a compound having the formula $AHAuCl_4$ —where A represented the aconitine group—but isaconitine did not furnish such a body, $AuCl_3$ being introduced into the molecule. The product formed colourless crystals with a melting-point of $205^\circ C$. Experiments made with the view of discovering how this reaction proceeded had so far been negative, but the authors hoped to be able to attain more definite results before long.

A second paper from the Pharmaceutical Society's Research Laboratory recorded the results of work done by the Director and Mr. H. A. D. JOWETT on "Modifications of Aconitine Aurichloride." It had been observed that specimens of this compound had varying melting-points, and an investigation was set on foot with the object of determining the reason of the variation. The result was that the authors isolated three distinct crystalline modifications of the double salts, all having the general formula $C_{34}H_{48}NO_8HAuCl_4$. Crystallised from acetone and water, the product, distinguished as the α variety, had a melting-point of $135.5^\circ C$. If this were crystallised from alcohol, a second form (β) resulted, which melted at 152° ; and this crystallised from chloroform and ether yielded the third (γ) modification, melting at $176^\circ C$. When either of the two latter varieties was heated to the melting-point the authors always got back the α body, melting at $135.5^\circ C$. So far they had not been able to convert the α directly into the γ variety, but otherwise the modifications were mutually convertible.

Professor RAMSAY questioned the correctness of the nomenclature, and suggested that for the term aurochloride, which he thought Professor Dunstan had used, the name hydraurochloric acid should be used. Professor DUNSTAN, with some asperity, pointed out that he had employed the term aurichloride, and added that the abandonment of this term, so well known among chemists, would only be justified if there were any risk of confusion, and he did not believe that there was any such risk.

Mr. S. U. PICKERING, in a note on

THE STEREOISOMERISM OF NITROGEN COMPOUNDS,

handled in a manner at once airy and sarcastic the stereochemical theories, in the framing of which, as he said, to the

awe and amazement of the non-expert, a certain class of *savants* has recently reached such remarkable results. Starting, in the case of the tetravalent carbon, with the very reasonable supposition that the four monad atoms or groups of a saturated compound would be arranged at equal distances from the carbon and from one another, the concept of the tetrahedron was arrived at. Here the carbon atom was assumed to occupy a position corresponding to the centre of gravity of the figure, and the four monads its angular points. This conception was carried over to the nitrogen compounds, but as this element was only trivalent a different arrangement of the atoms was necessary. It was, therefore, assumed that the nitrogen atom occupied one angular point of the tetrahedron, while the three monad atoms, or groups, were placed at the other three angles. When, however, the theory had to be applied to compounds in which nitrogen played, apparently, the part of a pentad, another difficulty was met, and in order to overcome this it was found necessary to shift the nitrogen atom to the centre of the tetrahedron, together with one of the monad atoms or groups to keep it company. All this kind of thing the author characterised as absurdly improbable, while at the same time in a number of instances it did not explain anything more satisfactorily than the ordinary graphic representation in one plane. He suggested that the principle of selecting the simplest arrangement possible should also be followed in the case of nitrogen compounds. Such a principle would lead, in the case of ammonia, to the conception of a figure in which the hydrogen atoms would be arranged in one plane round the nitrogen atom at the extremities, so to speak, of lines of force focussing in the nitrogen, and forming angles of 120° with one another. When compounds where all five bonds of the nitrogen were saturated came under consideration it would be necessary to assume that the two extra monad groups or atoms were attached to the nitrogen in a plane at right angles to the first three and in the same line with one another. Such a system would not, obviously, be perfectly symmetrical, but would tend to split up in certain well-defined directions. For this very reason the hypothesis explained satisfactorily the behaviour of a number of nitrogen compounds, and, further, it seemed likely to throw light upon the constitution of the oxides of nitrogen—a department of chemistry which had long been a reproach to the theoretists.

Professor DUNSTAN thought the theory seemed simple and satisfactory. In expressing a doubt whether nitrogen could be regarded as acting as a pentad the speaker was supported by other members. What was wanted was some experimental work in this direction, and the Professor hoped before long to be able to add something to the knowledge of the subject from the experimental side.

Mr. PICKERING followed on with a note on

THE BEHAVIOUR OF STRONG SOLUTIONS

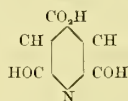
—a contribution to the work which has been done of late years on the relation between the variation of strength of solutions and their physical constants. Attention had been almost exclusively given to dilute solutions, and many irregularities in the relations referred to had been brought to light. The communication of Mr. Pickering showed that these irregularities became more marked when strong solutions were studied. Acetic acid, water, and benzene had been used as solvents, and effects of dissolving in them various salts upon the freezing-point determined. It was found that the effect of concentration was by no means constantly proportional to the depression of the freezing-point brought about. This was illustrated by curves. Electrolytes gave enormous depressions compared with non-electrolytes. The author thought there was reason to believe the phenomena to be due to different compounds of the substances dissolved and the solvent, and exhibited a table showing "breaks" in the combination between the solvent and substance.

Professor RAMSAY was surprised that the author had made no experiment with sugar, and observed that he had dealt with very complex molecules.

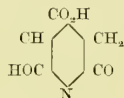
"STUDIES ON CITRAZINIC ACID,"

by W. J. SELL and H. EASTERFIELD, was the title of the next paper. The question considered was the constitution

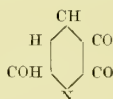
of the acid obtained by the action of sulphuric acid on citramyl. The formula proposed for it was—



but the authors thought its reactions would be better explained by the formula—



The acid could also be prepared in good quantities by fusing together citric acid and urea, and this method was used by the authors. Its characteristic test was the production of an intense blue colour with warm dilute solution of potassium nitrite. Primarily the body produced was colourless, but this on exposure absorbed oxygen and became blue. The acid was not fluorescent in acid solutions. Reducing-agents converted citrazinic acid into quinhydrone—



The corresponding quinone was yellow, and stained the skin; it readily yielded acid and alkaline salts. On the whole, the authors concluded that the behaviour of the compound supported the formula they suggested.

Dr. COLLIE touched upon the theoretical significance of the non-fluorescence of citrazinic acid, and expressed the belief that the fluorescence exhibited by it under certain conditions was due to an oxidation-product.

The PRESIDENT dilated upon the desirability of chemists being scrupulously careful in their work, so that everyone who followed them would not have to test the correctness of their work, and expressed the opinion that the formula proposed did not altogether explain the behaviour of the acid.

Mr. W. P. BLOXAM's paper on

AMMONIUM SULPHIDE AND SULPHYDRATE

was a remarkable contribution in many respects. It was exceedingly long, and at once diverting and tedious. As the hands crept on round the clock-face, and still the author continued with unflagging energy, the Chairmain interposed twice in the hope of cutting short the flow of words and formulae. In vain; the author evidently revelled in his subject, and both prefaced and concluded it with a vigorous defence of the importance and interest of the subject. In spite, however, of all his declamation and fierce attacks upon the text-books, Mr. Bloxam was not convincing, and had there been time for discussion he would undoubtedly have had much to reply to and defend. The main feature of his paper may be expressed very briefly; it was, that by the action of H_2S on strong ammonia a number of substances might be produced, but rarely NH_4HS . In order to obtain this sulphydrate it was necessary to dilute the ammonia (s.g. 880) with at least 4 volumes of water. At normal temperatures a substance of the formula $(\text{NH}_4)_2\text{S} \cdot 2\text{NH}_4\text{HS}$ was produced, while by reducing the temperature a product richer in the sulphydrate could be obtained up to $(\text{NH}_4)_2\text{S} \cdot 18\text{NH}_4\text{HS}$. Commercial ammonium sulphide, he believed, consisted really of NH_4HS and NH_4HO . His work upon the polysulphides led him to the conclusion that the simple polysulphides were difficult to obtain, and not primary products. He gave a list of the sulphides of whose existence he had obtained evidence, and added that he had never got one corresponding to the formula $(\text{NH}_4)_4\text{S}_9$.

The last note was on

ESSENTIAL OIL OF HOP,

from which Mr. A. C. CHAPMAN had obtained a sesquiterpene with a specific gravity of 0.8987 and a rotatory power of +1.2.

The meeting then adjourned till the first Thursday in November.

French Pharmaceutical News.

(From our Paris Correspondent.)

THE CHICAGO CONGRESS.—In reply to an invitation from the American Pharmaceutical Association, the Paris Society of Pharmacy has decided to send a delegate to the International Congress of Pharmacists at the World's Fair. It is probable that M. Adrian will be the representative of French pharmacy.

THE MINERAL-WATER TRADE.—Mineral-waters sold in Paris are in future to be subject to analysis by the Municipal Laboratory. Up to the present a Commission composed of five doctors of medicine has been charged with the duty of inspecting the factories and dépôts of mineral and seltzer waters in the Seine Department. On account of several deaths, this Commission became reduced to one—Dr. Pietra Santa—for by a strange oversight the deceased members had never been replaced. Such a state of affairs practically amounted to an absence of supervision, and manufacturers of mineral-waters could put the most obnoxious products on the market without much fear of detection. The Commission has now been suppressed, and the factories will be controlled by inspectors from the Prefecture of Police.

MEASURING THE INTENSITY OF PERFUMES.—M. Mesnard drew the attention of the Paris Academy of Sciences last Monday to a new method he has adopted for analysing perfumes. His process is based on the principle that essence of turpentine possesses the property, even when diluted to an almost imponderable degree in air, of preventing phosphorus from shining in the dark. M. Mesnard has been able to determine, by special conditions, the quantity of essence of turpentine that causes the extinction of phosphorescence. By an ingenious system the turpentine is made to serve as a common standard by means of which the intensity of the perfume is determined. The process to be followed is to neutralise, as regards the odour, the perfumed atmosphere of a recipient by air charged with essence of turpentine, and then to measure the amount of the scale given by the essence by means of the phenomenon of the extinction of phosphorescence. A cleverly-contrived apparatus, worked by means of indiarubber tubes, enables the various operations of the analysis to be successfully carried out. This method can also be used for measuring the intensity of perfume obtained from flowers, and it will certainly contribute to elucidate numerous interesting questions concerning vegetable physiology.

THE ICE-TRADE OF PARIS.—As a result of the inquiries and researches made by a commission of eight chemists, the Council of Hygiene has issued a report, prepared by M. Riche, recommending that the Prefect of Police shall enforce a series of measures for controlling the sale of ice. Manufacturers and retail dealers are to be forbidden selling for alimentary purposes ice that has not been made from Paris drinking water, or that may produce, when melted, water that is unfit for use. Ice that is prepared for drinking purposes must in future be kept quite apart from that used merely for cooling. Each kind must be kept in a separate room and, on the door of each, labels must be affixed according to the kind stored. In one instance the notice will read "Alimentary Ice," and the other "Ice not for Alimentary Use." The latter must be printed on a red label, and will thus be the poison-cupboard of the ice-trade. Vehicles used for carrying the product are to be similarly labelled, and are to serve for no other purpose. Finally, retail dealers who have only sufficient storage for one kind can only keep the pure or "alimentary" ice. M. Riche's report is an instructive account of the dangers incurred by using the impure article. He quotes at great length from American authorities on the subject, and expresses the opinion that the various kinds of dyspepsia, so common in the United States, which are attributed to ice, are the result of consuming that which has been made from impure water. In this connection M. Pasteur has written to M. Riche as follows:—"Dr. Roux has given you his opinion and I concur with him. All water that is unfit for drinking is equally noxious for preparing in winter ice for alimentary purposes. Almost all microbes resist the lowest temperatures."

Trade Notes.

THE freehold premises occupied by Messrs. Perken, Son & Rayment, manufacturers of photographic apparatus, at 99 Hatton Garden, of the rental value of 500*l.* a year, are to be offered for sale at the Auction Mart, Tokenhouse Yard, on July 5, by Messrs. Edwin Fox & Bousfield.

DRUG CONTRACTS.—Mr. George Eade, pharmaceutical chemist, of Goswell Road, as Chairman of the Dispensary Committee of the Holborn Union of Guardians, moved, at the meeting of the Board on Wednesday night, that in view of the forthcoming "contract-day," the drug contract be revised, so as to ensure a proper and an efficient supply. This was adopted.

LONDON COUNTY COUNCIL CHEMICALS.—The Main Drainage Committee reported to the London County Council on Tuesday that they had received a letter from Messrs. C. Christopherson & Co., with whom the Council last year had contracts for the supply of lime to the outfalls, stating that the fact that the contract was so near completion had been overlooked, and that a vessel had been chartered to take a cargo of about 300 tons more than is actually required to complete the contract. They therefore asked the Council to purchase this cargo, which they offered at the price of the lowest tender accepted by the Council at the last meeting—viz., 13*s.* 9*d.* per ton. The Council resolved that, subject to an estimate being submitted to the Council by the Finance Committee, as required by the statute, 300 tons of lime be purchased of Messrs. Christopherson & Co., at 13*s.* 9*d.* per ton.

DR. NANSEN, the Norwegian Arctic explorer, who is anxious to add to the laurels of his snow-shoe journey across Greenland the fame of discovering the North Pole, is about to start upon his enterprise this week. The doctor intends to allow his little craft, the *Fram*, to be carried from the Eastern Siberian coast by a current which he supposes to float past the North Pole, and calculates upon emerging sooner or later somewhere on the Arctic coast of North America. He has laid in provisions for a five years' journey, and was recently in London for the purpose of selecting certain supplies of goods. To Messrs. Cadbury Brothers, of Birmingham, he gave an order for 1,500 lbs. of their cocoa-essence and chocolate in hermetically sealed tins, and, calling upon Messrs. Armour & Co., at their Tooley Street warehouse (at the recommendation, we are told, of a leading Government analyst) he purchased from them a five years' supply of their meat products. There is, therefore, every prospect (if Dr. Nansen should be successful) that the discovery of the Pole may be celebrated *ad hoc* by drafts of Cadbury's invigorating product and the cheering cup of Armour's extract of beef.

In the great soap tournament which has been such a prominent feature of our commercial history in these latter days, the manufacturers of Lanoline Soap are determined to take a front place. They have made several alterations lately, largely in favour of their customers and of cleanliness generally. In the first place they have increased the weight of their 1*s.* tablets from 3½ oz. to 5 oz. without making any difference in their wholesale terms. They have also introduced a 2½-oz. tablet to retail at 6*d.* Every tablet of either size is packed into a neat and newly-designed carton. As to the soap itself the makers have been perfecting their processes so as to produce a soap as nearly scientifically accurate in its composition as soap can be. We submitted a sample of it to an eminent chemist who, after carefully testing it, reported that he had found it "free from alkali existing in the free state. It is," he added, "a remarkably dry soap. The moisture was found to be 6.5 per cent. The percentage of sodium in the soap is 6.9, which is almost the theoretical quantity." The makers, we may state, had informed us that they had reduced the free alkali to .008 per cent. We believe the agents, Messrs. Burroughs, Wellcome & Co., are willing to exchange stock of the old tablets for the new ones for any chemists who may desire this.

Personalities.

MR. WALTER R. HADWEN, who has been in business as a chemist in Highbridge, Somerset, for several years, has recently qualified as a physician, surgeon, and apothecary.

MR. ROBERT HENRY HARLAND, F.C.S., of Plough Court, Lombard Street, E.C., has been re-elected public analyst for Greenwich, at a salary of 100*l.* per annum.

WE regret to hear that Mr. Henry S. Wellcome (Burroughs, Wellcome & Co.) has been called to the United States of America by the serious illness of his mother. He sailed on the s.s. *Campania* on Saturday last for New York.

MR. ERNEST J. PARRY, B.Sc., has been appointed gas analyst to the Administrative County of London. The appointment was the result of a stiff competitive examination in practical gas analysis, for which 20 candidates presented themselves.

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

MITCHELL—FITCH.—On June 20, at St. John's, Hackney, Walter R. Mitchell, chemist, of 60 Abbeville Road South, Clapham, to Gertrude Winifred, second daughter of R. O. Fitch, chemist, 255 Well Street, South Hackney.

PARRY—KIELLIS.—On June 19, at St. Gwendoline Church, Talgarth, by the Rev. John Bowen, M.A., vicar, John Parry, pharmaceutical chemist, formerly with Hooper & Co., Grosvenor Street, London, now of Phoenix Pharmacy, Talgarth, to Lizzie S. Kiellis, eldest daughter of Mr. Alfred Kiellis, post-master, Talgarth.

UMNEY—CARTER.—On June 20, at St. George's, Bloomsbury, by the Rev. W. Smyly, M.A., assisted by the Rev. Corrie Jackson, M.A., William Francis Umney, M.D. Lond., M.R.C.S. Eng., of Heatherbell, Crystal Palace Park Road, Sydenham, eldest son of Charles Umney, of Southwark and Sydenham, to Beatrice Ethel, third daughter of the late J. Sloane Carter, of 31 Bedford Square, London.

DEATHS.

SEARLE.—The death is recorded of Mr. William Searle, of Crediton, at the age of 75 years. The deceased formerly carried on business as chemist and druggist, and subsequently as a medicinal-lozenge manufacturer, in which capacity he was well known in the West of England.

STANFORD.—Mr. J. H. Stanford, who was formerly a chemist at Stamford, has just died at Cape Town, at the age of 43 years.

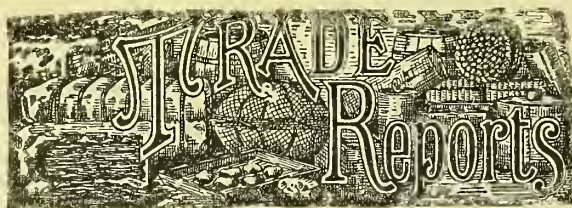
THWAITES.—On June 20, at Streatham, after a brief illness and much suffering, Mr. Alexander Thwaites. Aged 75. Since August, 1857, Mr. Thwaites had been the valued representative of F. Newbery & Sons, by whom his loss is deeply regretted. Mr. Thwaites, like his predecessor, Robert Pegg, had known somewhat of "bumping the bags" at a period when Stores were not and the modern "cutter" had not come into existence. He was justly esteemed for his strong force of character, was a man of quiet literary tastes, a true gentleman, and a faithful friend.

Business Changes.

MR. L. W. BRIDGEMAN, of Mary Church, has disposed of his business to Mr. J. W. Cocks, of Torquay.

MR. H. A. WORTS, of Harwich, has opened a new pharmacy at 2 The Parade, Clacton-on-Sea.

MR. THOMAS CONLEY, from Edinburgh, has purchased the chemists' business lately carried on by Messrs. Jamieson & Willock at Auchtermuchty.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., June 22

The Trade in Cassia and Anise Oils.

In 1892 there was a most remarkable development in the export trade of star-aniseed and the essential oils of aniseed and cassia from the Chinese port of Pakhoi, reports our Consul there. In the former article the advance has been from 15,185*l.* in value to 35,579*l.*, or considerably over 100 per cent., and in the latter the export has more than trebled, reaching a value of 41,408*l.*, as against 13,074*l.* in 1891. Chinese traders, who alone have any knowledge of the trade in star-aniseed and essential oils, assert that this extraordinary increase is due solely to increased production, and further state that every alternate year there is a large increase in the trade. This latter statement is, however, only partially verified by the Customs returns for past years in the case of star-aniseed, and not at all in that of the essential oils. The consul is, therefore, inclined to account for the great increase, in part at any rate, to a change of route, and believes that whereas in past years these goods have been sent in native boats to Macao by the West River, last year, possibly owing to increased taxation by that route, the trade has been diverted to Pakhoi. The essential oils of aniseed and cassia are mainly destined for export to Europe, where the demand, stimulated no doubt by the heavy fall in silver, has greatly increased. Inquiries have been made by European firms with a view to purchasing the oils in Pakhoi, but the trade is entirely in the hands of the Macao merchants established there, who prefer to send them to Macao before sale to foreigners and shipment to Europe, and it seems improbable that they will ever be purchased at profitable rates, or indeed at all, in Pakhoi.

The exports were as follows: Star-anise—1892: 1,722,000 lbs., value 35,579*l.*; 1891: 775,710 lbs., value 15,185*l.* Cassia and anise oils—1892: 204,864 lbs., value 41,408*l.*; 1891: 74,048 lbs., value 13,074*l.*

Java Cinchona Profits.

At the annual meeting of the shareholders in the company for cinchona-cultivation, "Melattie" in Java, held in Amsterdam on June 7, a dividend of 7½ per cent. was declared for the year 1892, after distribution of which the amount of 1,250*l.* was carried over to the reserve fund.

The Zanzibar Clove-crop.

The 25 per cent. *ad valorem* export duty on cloves constitutes the chief part of the revenue of Zanzibar. This duty, says the British Consul, is always collected in kind, and the sums realised by sales in the course of the year, together with the balance remaining in hand on December 31, calculated at the current rate, produce a total value of 5,00,340*r.*, which falls short by 14,896*r.* of the total realised in 1891.

The sales are effected either by public auction or private treaty, the former course being that which the Government originally intended to pursue. It reserved to itself, however, the right of private sale, and this has been found to produce more satisfactory results, from a pecuniary point of view, than the public auctions, since there appears to be a certain reluctance among the purchasers to come forward in the open

market, and it has been repeatedly the case that the bids in auction have not nearly equalled private offers made before the auction commenced, or even the prevailing current prices. Any surplus not sold in auction has always realised a higher price immediately afterwards.

The clove-crop, as has been frequently pointed out, suffers from the insufficiency of available labour in Zanzibar. Domestic slave labour is, under present conditions, a steadily diminishing resource, and the Arab proprietors, mortgaged as they are through both the islands to the Indian money-lenders, have no available money, even had they the habit and inclination to hire additional labour. They barely contrive to make both ends meet by such crops as they can gather in with their domestic slaves, whom they pass on reciprocally from farm to farm when the short gathering season arrives. A considerable proportion of the crop always remains ungathered, and it is noticeable that large portions of various big estates are falling out of cultivation.

It is not surprising, therefore, to find that the total produce of the clove-crops in 1892 has fallen short of that of 1891 by some 50,000 frasilas, while that of 1890 again was upwards of 100,000 frasilas better than that of 1891. The steady decline in the produce of Pemba has in 1892 been somewhat compensated by a considerable extension in the Zanzibar crop, but the cultivation generally seems to be decreasing; the crops for the current year do not promise to be very heavy, and prices may therefore still further advance.

The Supply of Formosa Camphor.

Messrs. August Faber & Co. write:—"In reference to an interesting article in your last number, will you allow us to point out that the writer appears to have fallen into an error respecting the Japan production of camphor, of which shipments from the three ports average just about 45,000 piculs per annum for the five years ending 1892, not 15,000. They are given to us as 44,250 piculs in 1888, 49,800 piculs in 1889, 43,630 piculs in 1890, 41,700 piculs in 1891, and about 40,000 piculs in 1892, so that the Formosa increase, although well worthy of notice, does not constitute such an overpowering element as might appear from the wording of your notice."

Musk-rat Perfume.

The skins of the sondeli, or musk-rat, are imported into Suakin for the purpose of manufacturing from them a perfume much used by the Soudanese. The imports of these skins into Suakin amounted to 375 lbs. last year; they came from India, and to a smaller extent from Massowah. The total value of the skins was 319*l.*

The Approaching "Interesting Event."

In the ordinary course of events, Thursday, July 6 (the date of the Royal wedding), would have been a drug-sale day, but the wholesale druggists, who had already come to an informal understanding to close their establishments on that date, made up their minds during the week that, so far as they could determine the matter, no auctions should be held, and passed round the word accordingly. Hence, when Mr. Figgis ascended the rostrum, he referred casually to the "interesting event," which would happen of July 6, and left it to the room to decide whether any auctions should be held or not—he thought they would like them skipped. At this there were loud cries of "Yes, yes!" the harmony being broken only by one discordant voice, that of Mr. Thomas Clark, who objected to "seizing any excuse for a holiday," and, like Truthful James, used further language of a decidedly free and plain-spoken character. He did not, however, stick to his guns to the bitter end, and the proposal to postpone the next auctions to July 20 was carried without a division, Mr. Barron objecting to take a "vote of the room" on the ground that only the heads of firms, and not the "young men" and "clerks" present, were competent to decide. There is reason for believing, however, that had the young men in question been permitted to express their views they would have enthusiastically voted for the loyal observance of the day as a holiday.

ACID (CITRIC).—Firm at 1*s.* 5½*d.* per lb.

ALOE.—Of *Socotrine* aloes a somewhat poor assortment was shown to-day, and only in common quality were any

sales effected. A parcel of 53 kegs from Bombay was bought in, at prices varying from 30s. per cwt. for low dark watery to 90s. for fair brownish of good flavour. Nineteen packages in skins sold at 20s. to 27s. per cwt. for dark to pale orange, very watery. Of *Cape* aloes there are still no arrivals, and only an odd lot or two, aggregating 11 cases, were shown to-day. For fair quality 28s. per cwt. was paid, making an advance of about 1s.; for very low stony rubbish a bid of 3s. per lb. was refused. No *Curaçao* aloes was offered.

AMMONIA CARBONATE.—The price has been advanced to 3½d. per lb. *Salammoniac* has been raised to 37s. for first, and 35s. for second quality.

ANISE.—For a parcel of 14 bales spurious *Star-anise* (Japanese) a bid of 19s. per cwt. was refused to-day. Twenty-one bags of fair *Russian* seed are held at 22s. 6d. per cwt., which is said to be the market price.

ANNATTO.—A few cheap lots sold at auction to-day: Good bright seed from Madras at 2½d. per lb., common ditto at 1½d. per lb.

ARECA.—Very neglected. Fifty bags from Ceylon at to-day's auctions could not find a buyer even at 20s. per cwt. The market is very much over-supplied. For another lot an offer of 19s. 6d. per cwt. was refused.

BALSAM COPAIBA.—Quiet at to-day's auctions. A newly-imported parcel of 24 cases Maracaibo, *via* Havre, each of 2 tins, rather cloudy good pale to dark brown: was offered; for one of the best lots a bid of 1s. 5½d. was refused.

BALSAM (PERU) seems to be more plentiful, 11 cases being offered to-day, part of which has just been received from New York; worked balsam was bought in at 7s. 3d.; and for unworked 7s is asked, but the highest bid obtainable at auction was 6s. 3d.

BALSAM (TOLU) is getting very scarce; 1s. per lb. is generally asked, and it is questionable whether any can be had below that figure. At to-day's auctions none was offered.

BENZOIN.—In rather small supply, and presenting no features of importance. *Siam* gum is steady, 4 cases small bright almonds in block sold at from 7l. 10s. to 7l. 15s., which is a fair price. Five cases dull grey siftings in block were bought in at 60s. per cwt. Of *Sumatra* gum 39 cases only were shown, all seconds, with broad dark corners and good centres, these were bought in at 5l. 15s. to 6l. Twenty cases fair, partly alomdy, *Palembang* sold without reserve at 36s. to 38s., showing a slight improvement in value.

BORAX.—Steady, and without alteration in price. At the drug-sales a parcel of 21 casks was sold without reserve, "all faults"; the bidding began at 1s. per cwt., and the parcel sold at from 9s. to 10s. 6d., which is barely one-third the price of sound borax.

BUCHU.—Round leaves keep fairly steady, 11 bales out of a newly-imported parcel of 14 realising 5d. to 5½d. per lb. to-day. Another consignment of 12 bales was bought in at 5½d. per lb. One bale of fair long green leaves brought 10d. per lb., subject to approval, which shows a trifling decline. A single consignment of 133 packages arrived from Cape Town by the *Clan Macgregor* last week.

CALUMBA sold at a little improvement on the recent decline. Out of one parcel of 34 bags, 20 sold at 17s. 6d. per cwt. for fair rather grey sorts, or about 1s. 6d. above valuation. Several other parcels were bought in at nominal prices.

CAMPHOR (CRUDE).—On the spot, *Japan* camphor is held for 155s. and China for 135s. per cwt., but no business is reported, although a transaction in *Japan* camphor is thought to be imminent. For shipment, *Japan* offers at about 135s., while for China (July-August shipment) the nominal quotation is 115s., but we believe that there is at least one parcel offering at 113s. 6d., c.i.f. terms.

CANARY-SEED.—Turkish seed is again dearer, with sales at 64s. to 65s. since last week.

CANNABIS INDICA.—There is no demand, although owners would be willing to take lower prices to clear out. For one parcel of 62 robbins, grey-brown tops, 4d. per lb. would now be taken, but only 3½d. per lb. was bid. Fair siftings are

held for 2½d. per lb.; common ditto are reported to be selling at 2d. per lb. privately.

CARDAMOMS.—A very irregular market, common kinds being, upon the whole, rather dearer; while fine cardamoms (which have been comparatively very high-priced lately) declined from 3d. to 4d. per lb. in value. Of 123 cases about 73 sold as follows:—*Ceylon-Mysore*, fine bold heavy, 3s. 6d. to 3s. 8d.; medium to bold yellowish, 2s. 7d. to 3s.; good pale small to medium round, full, 2s. 4d. to 2s. 6d.; medium pale long, 2s. 2d. to 2s. 3d.; fair long greyish, 2s. to 2s. 1d.; small yellow, 1s. 10d.; small to medium brown, 1s. 7d. to 1s. 9d.; small split, dull and broken, 1s. 2d. to 1s. 5d. per lb. *Ceylon-Malabar*, fair small to medium brownish, 1s. 8d.; seed, common to fair, 1s. 3d. to 1s. 6d. per lb.

CHAMOMILES.—At the auctions 8 bales small palish Belgian flowers sold, with good competition, from 60s. to 61s. per cwt.

CHIRETTA.—At the auctions 2-cwt. bales of fair quality are held at 10d. per lb.; a bid of 8d. was refused to-day.

CIVET keeps steady, but there were several packages in auction to-day, none of which sold, however; they were bought in at nominal prices.

COCA-LEAVES.—Fourteen cases Ceylon leaves rather dark to fair greenish mixed, small to medium size, brought 1s. per lb.

COCHINEAL is in very small supply, and most of the owners hold for increased rates. Black Teneriffe, 1s. 1d. to 1s. 3d.; silver ditto, 1s. 1d. to 1s. 2d.; greyish black, 11d. to 1s. 1d. per lb. There is not much demand.

CUBEBS.—It is said that some business has been done privately at 75s. per cwt. for good blue berries. At auction to-day none of this kind was offered, and for the brown variety there was no demand whatever. Brown and more or less stalky mixed berries were held at 70s. to 75s. per cwt., and for a small parcel of dust a bid of 13s. per cwt. was rejected, the owner asking 15s. per cwt. Another lot of 20 bags fair brown mixed berries without stalk is also held for 75s. per cwt. In Amsterdam the market remains exceedingly dull, and sales are limited to trifling parcels at the equivalent of about 67s. 6d. per cwt. net for bold berries.

CUMIN-SEED.—A small parcel of Mogadore seed was bought in at 21s. per cwt.; it is said that 20s. has been paid for similar quality.

DRAGON'S BLOOD.—*Socotrine* gum in drop is very neglected, and at to-day's sales there was no bid for 29 cases even at 40s. per cwt. *East Indian* gum is held for high prices, but is becoming rather more plentiful; 19 cases were shown and all bought in, 10l. being the quotation for good pale bright red slabs.

ERGOT OF RYE is rather firm, and there has been a good inquiry. At to-day's auctions 2 bags of common wormy ergot from Hamburg brought the steady price of 1s. 5d., another lot, fair but wormy, was bought in at 1s. 10d. per lb.

GALANGAL.—Of 177 bags, 69 damaged sold at 16s. 6d. per cwt.

GAMBOGE sold at a decline of about 5s. to-day, about 10 cases out of 25 being disposed of at 13l. for small to bold bright orange pipe of good fracture; 10l. 10s. for fair chips; 10l. for small to bold mixed dull ricy Saigon pipe; 9l. to 9l. 5s. for dull ricy lump and pipe; and 7l. 15s. to 8l. for ordinary pickings. The drug is in rather better supply again.

GUM MYRRH.—In good supply at present, 101 cases being offered at to-day's sales, of which about 20 sold at rather easier prices—namely, 110s. for fair Aden picked; and 90s. for fine bright sorts; for ordinary dark sorts, a bid of 77s. 6d. was refused.

HONEY.—Considerable quantities of new-crop Jamaica honey were offered to-day and sold at fairly steady prices for good qualities, but at a decline of 1s. to 2s. for commoner kinds. Of 312 barrels 183 sold at 28s. 6d. to 30s. for good clean brown liquid, 24s. 6d. to 25s. 6d. for fair ditto, and from 22s. 6d. to 24s. for rather ordinary dark mixed.

INDIARUBBER is higher, with sales of fine Pará on the spot at 3s. 0¼d. per lb.

IPECACUANHA.—Of *Brazilian* root 116 packages were offered to-day, the greater part again consisting of very ordinary woody quality. Nine bales were offered "without reserve"—an unusual occurrence in this article. The first lots offered were of very common quality and sold at some slight decline, but the market recovered very quickly, and when the second catalogue was reached prices advanced considerably, the upshot being a rise of from 4*d.* to 9*d.* per lb. Sixty bales were sold. The following prices were paid:—Fair annulated sound, 5*s.* to 5*s.* 4*d.*; woody and stalky from 3*s.* 10*d.* to 4*s.* 11*d.*; very common lean, 3*s.* 2*d.* to 3*s.* 7*d.* per lb.; lean to fair, more or less damaged, 3*s.* 8*d.* to 4*s.* 10*d.* per lb. *Cartagena* root is also dearer, with sales of a few bales (out of 17 offered) at 3*s.* 8*d.* to 3*s.* 9*d.* for bold but damaged, to 3*s.* 10*d.* to 3*s.* 11*d.* per lb. for picked.

JALAP.—At auction to-day a parcel of 23 bales was offered by the same broker who sold at low rates at the previous auctions. It consisted of 23 bales Vera Cruz and Tampico mixed, small to bold, partly split, and brought 10*d.* to 1*s.* per lb. for sound, and from 9½*d.* down to 7½*d.* per lb. for slightly damaged to low mouldy and burnt quality. This shows a fresh decline of about ½*d.* per lb. Another parcel of 33 bales small to medium damaged sold at 8*d.* to 9½*d.* per lb. For fair to good heavy Vera Cruz 1*s.* to 1*s.* 1*d.* per lb. is wanted. One case of fair heavy but small *East Indian* jalap sold at 9½*d.* per lb., subject to approval.

KOUSO.—Eight bales were shown to-day, partly of fair quality, but all loose and mixed with stalk. They were bought in at from 1*s.* to 1*s.* 10*d.* per lb.

LIME JUICE.—At auction to-day 50 hogsheads dull West Indian juice were bought in at 1*s.* 5*d.* per gallon. The market is dull, but for good quality 1*s.* 3*d.* per gallon is still wanted.

MUSK.—In fair supply, and partly forced off for sale at a decline of about 5*s.* on first pile and 2*s.* 6*d.* on third pile. The following prices were paid:—*Tonquin pods*: 3 caddies fair small to bold, blue and brown skin, fairly well trimmed but damp, 61*s.*; 1 caddy small to medium old-fashioned damp unsightly pods, partly broken thin top skin, 48*s.*; 4 caddies small to bold, fair shape, old-fashioned, badly trimmed and unsightly pods, 50*s.* per oz.; for fine medium to bold, thin blue skin, good flavour, 77*s.* 6*d.* per oz. was refused; 3 caddies second-pile pods, very skinny dry old-fashioned, sold at 40*s.*, and 6 caddies good old-fashioned well trimmed third pile, partly false-packed, at 29*s.* to 30*s.* per oz.

OILS (ESSENTIAL).—Of *Star-anise* oil 5 cases sold to-day at 5*s.* 6*d.* per lb., which is 2*d.* below the normal spot price; but we are told that there is no more to be had at that figure, 5*s.* 8*d.* being again the quotation. *Indian Geranium oil* of good quality is scarce, and 3*d.* is asked for it. Fair native *Oil of Lemongrass* is held at 2½*d.* per oz. For 2 cases *Spanish Lavender oil* 3*s.* was asked to-day; 3 cases fair pale *Eucalyptus oil* from Adelaide were bought in at 1*s.* 6*d.*, an offer of 1*s.* 2*d.* per lb. being rejected. We hear that the prospects of the Mitcham *Peppermint* crop are exceedingly bad, and that the price has already been advanced to 32*s.* per lb. for fair oil of last year's crop. *Menthol* has advanced, and is now held for 11*s.* 3*d.* per lb. on the spot, with very little offering at that figure.

OPIUM.—The auctions to-day included 20 cases Patna (East Indian) opium marked "damaged," and offered for sale "with all faults, for account of whom it might concern." The parcel (to which reference is made elsewhere in our Editorial columns) was offered "per case" of 40 balls, without allowance for tare. Each ball weighed about 4 lbs. 3 oz., and contained about 3 to 4 oz. of leaf-covering. "To the best of my knowledge and belief," said the broker, before offering it, "the opium itself is sound, only the covering having been touched by sea-water." An analyst certified the opium, which appeared in a dark brown treacly mass, to contain 6·3 per cent. of morphia. Most of the opium-dealers and morphia-makers were present at the sale, which was preceded by some discussion as to whether the test included the covering (which was, of course, denied), and why no allowance for tare was made. Finally a bid of 20*l.* per case was made for the first lot, and by quick instalments this was increased to 40*l.* per case. At that figure

the hammer fell on the first lot, and nine others followed at the same price, representing as nearly as possible 5*s.* per lb. The ten cases were all knocked down to one firm of Liverpool drysalters. The regular opium-dealers ceased to compete when the bidding began to approach the selling limit. Ten cases were bought in, and another lot of 30 has just been landed. A case of country-damaged *Persian* opium, limited at 10*s.* per lb., was bought in. The London market is firm, but quiet. Writing on June 15 a Constantinople correspondent states: "The business transacted on this market during the past fortnight amounts to about 50 cases *Druggists'* sold to native speculators at up to 11*s.* 3*d.* f.o.b. and 10 cases *Zille talequale* at 11*s.* 9*d.* f.o.b. The drought which has prevailed in the interior up to the present has had a disastrous effect on the spring plants; some persons going so far as to say that they are totally destroyed. Rain has now fallen, but too late to prove of any benefit except to the autumn sowings, for which serious apprehensions had begun to be held. The market is now firm at about 11*s.* 3*d.* f.o.b. for talequale, and the fact that United States buyers have again appeared in Smyrna after a prolonged "holding off" may further reassure holders. Our estimate of the crop is 2,500 to 3,000 cases maximum, probably less. In all likelihood prices will be constantly on the move either one way or the other until the actual output is ascertained."

OTTO OF ROSE.—The position is still uncertain, but the principal dealers appear to believe in higher prices. One of the consignees for a well-known brand informs us that he is asking 29*s.* per lb., and has instructions not to sell quantities of 100 oz. without consulting the growers. Another importer states that since the collection of the roses there has been in the Balkans alternately rain and sunshine, considerably benefiting the crop. He would not be surprised if, after all, a crop of 2,000 kilos. of the otto were to be collected. This may prevent a sharp rise in price, although there are no stocks. At the sales a case of 201 oz. of a well-known brand was bought in at 30*s.* We believe that it has been in stock here for several years, and is now in second or third hand.

QUASSIA.—The market has quite collapsed, apparently. We hear that sales have been made this week at 9*l.* per ton for logs, showing a decline of 25 per cent. At auction to-day 5*l.* per ton only was bid for 5 tons, which were bought in at 10*l.* *Chips* are nominally held at 20*l.* Eighteen casks of ground quassia were also bought in at 23*l.* per ton.

QUICKSILVER remains firm at 6*l.* 17*s.* 6*d.* from the importers, and 6*d.* less in the second-hand.

QUININE.—No business is reported during the week, but at to-day's auctions 5,000 oz. B. & S. in 100-oz. tins sold without reserve, at a decline of about ½*d.* per oz., at a nominal price, realising from 9½*d.* to 9¼*d.* per oz.

RHUBARB.—In good supply, 187 cases being offered to-day; only 16 cases sold, however, at easy prices. 1*s.* 2*d.* per lb. for *Canton*, medium to bold, round, fair coat, three-fourths fair bricky fracture; 1*s.* per lb. for small to medium ditto, damaged and rough in coat, round and flat. *Shensi* small to medium round druggists' root brought 1*s.* 5*d.*; small to bold, fair coated spongy round, three-fourths fair one-fourth dark fracture 1*s.* 2*d.* per lb. *Highbried* small round, fair fracture and coat 9½*d.* per lb. "The rhubarb trade," writes the British Consul at Chung-King, in China, in his report for 1892, "is constantly improving. The drug is bought up from the growers about Chiating by large dealers, who often advance money on the security of the crop. In 1892 the exports were 5,503 cwts., valued at 22,033*l.*; in 1891 only 1,909 cwts., valued at 8,672*l.*"

SARSAPARILLA.—There has been an unusually large arrival of *Red Jamaica* sarsaparilla, consisting of 15 bales. It was offered at to-day's auctions, and 1*s.* 3*d.* per lb. is asked for it. Damaged grey *Jamaica* sold at 1*s.* 4*d.* per lb. *Honduras* quiet, and slow of sale.

SENNA.—About 300 packages *Tinevelly* leaves, chiefly of low quality, were offered at to-day's auctions, and sold mostly at easier rates, very low damaged blackish to specky small to medium yellowish and green mixed, ½*d.* to 1¼*d.* per lb.

SQUILLS.—Ninety-four bags of low quality sold "without reserve" to-day at ¼*d.* to ½*d.* per lb. (1888 import), subject to the price defraying the charges.

VANILLA.—A very heavy supply of vanilla of all kinds was offered at to-day's auctions, and mostly disposed of with some difficulty at an irregular decline of from 6d. to 2s. per lb. The following prices were paid:—Fine crystallised, 8 to 9 inches, 13s. 6d. to 16s.; $7\frac{1}{2}$ to 8 inches, 11s. 6d. to 12s. 6d.; good chocolate, $8\frac{1}{2}$ to 9 inches, 15s. 6d.; $7\frac{1}{2}$ to $8\frac{1}{2}$ inches, 11s. 6d. to 14s.; fair to fine chocolate, slightly crystallised, $4\frac{1}{2}$ to 7 inches, 7s. 6d. to 12s. 6d.; common foxy to brown, from 2s. to 6s. 9d. per lb. The exports of vanilla from the Island of Tahiti were 25,560 lbs. (value 4,418l.) in 1892, and 24,585 lbs. (value 7,456l.) in 1891. Owing to the fall in the price of vanilla in 1892, some of the native planters neglected their plantations to such an extent that during the flowering season the inoculation of the plant was not attended to. As, therefore, there are, now that the demand has again increased, fewer bearing plants, the more thoughtful owners of plantations gain the advantage of the rise in price that has recently taken place.

WAX (BEES').—All varieties are again dearer, and at to-day's sales almost every package sold at about 2s. 6d. to 5s. advance: *Jamaica* at 7l. 15s. to 8l. 2s. 6d. per cwt. for fair to good red and orange; *Madagascar* at 5l. 17s. 6d. to 6l. 17s. 6d. for ordinary grey to good bright; *Australian* at 6l. 12s. 6d. to 7l.; and *Cape* wax at 6l. 10s. to 7l. per cwt.

THE LIVERPOOL MARKET.

ANISE.—For the recent import of 325 bags *Chilian* only 16s. was bid; holders have withdrawn for 19s. per cwt.

CALABAR BEANS.—A quantity offered at auction, but found no buyers at 2d.

CANARY-SEED.—Considerable sales, and good bright Turkish is held for 60s. to 65s.

GUINEA GRAINS are slow at 20s. No bids in auction for quantity.

OIL (CASTOR).—In consequence of arrivals per *Gackwar* and *Chancellor*, the price for good seconds Calcutta declined to $2\frac{1}{4}$ d., at which large sales were made; but the market has since recovered, and value is $2\frac{3}{4}$ d. to $2\frac{1}{2}$ d. First-pressure French is held at $2\frac{1}{2}$ d. to $2\frac{3}{4}$ d.

WAX (BEES').—*Chilian* sells steadily at 7l. 5s. to 8l. 5s. for yellow and grey to pale yellow.

THE NEW YORK MARKET.

(From our Correspondent.)

NEW YORK, June 13.

A SLIGHT improvement is noted in the jobbing-demand, which is most welcome after the long era of depression from which the chemical and drug trades have been suffering in common with the other lines of commerce. There is even some speculative interest manifested, though no particularly large transactions have come to light. The downward tendency which has prevailed in a general way for some time past appears to have been checked. *Balsam fir*, Canada, has weakened under the approach of the season for the new crop, and while \$2.25 is asked there are no takers. *Cascara sagrada* is dull at 5c. for round lots. *Opium* has improved in tone, and \$2.70 to \$2.75 is the price asked for cases. *Quinine* is looking up, and there is a fair jobbing demand, at 18 $\frac{1}{2}$ c. to 19c. in jobbing-lots. Domestic *Sugar of milk* is again lower, and is quoted at 12c. in barrels for powdered. Both *Tonquin* and Mexican *Vanilla beans* are firmly maintained at previous prices. *Coca-leaves* are dull, at 22c. to 25c. for Truxillo and 35c. to 38c. for Huanoco, but there is no disposition shown to push sales by making concessions. The depression in *Nitrate of soda* and agricultural chemicals generally continues to be the most prominent feature of that department of the market. Spot goods offer at \$1.80 to \$1.95, while for forward shipment \$1.72 $\frac{1}{2}$ is quoted. *Oil of peppermint* is dull, though it is reported that stocks are most low and that the weather in the growing-districts has been most unfavourable to young plants. Bulk is quoted at \$2.45 to \$2.65, and HGH at \$2.75 to \$2.80. *Ja ap* is quiet but steady at 21c. Mexican *Sarsaparilla* is held at 8c. to 8 $\frac{1}{2}$ c., with some sales. *Minnesota senega* is held at 54c., but no transactions are reported, save in a small way.

THE DUTCH MARKET.

AMSTERDAM, June 15.

THE cinchona-auctions to be held in Amsterdam on July 6 will consist of 246 cases and 6,364 bales, about 557 tons, divided as follows:—From Government plantations, 343 bales (about 33 tons); from private plantations, 6,021 bales and 246 cases (about 524 tons). This quantity contains: Of druggists' bark—*Succirubra* quills, 186 cases; broken quills and chips, 68 bales and 48 cases; root, 23 bales. *Officinalis* quills, 12 cases. Of manufacturing bark—*Ledgeriana* broken quills and chips, 4,615 bales; root, 912 bales. *Hybrid* broken quills and chips, 492 bales; root, 68 bales. *Officinalis* broken quills and chips, 154 bales; root, 32 bales.

DEED OF ARRANGEMENT.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act making any of these arrangements binding upon dissenting creditors.

Duncan, Alexander, 1 The Square, Bournemouth, chemist and druggist. Trustee, Anthony Stoddart Fox, 4 Holdenhurst Road, Bournemouth, estate agent, with a committee of inspection. Dated June 10, 1893; filed June 16, 1893. Unsecured liabilities, 3,115l. 8s. 3d.; estimated net assets, 1,306l. 10s.; creditors fully secured, 500l. The following are included as creditors:—

| | £ | s. | d. |
|--|-------|----|----|
| Allen & Hanbury, London | 146 | 11 | 1 |
| Bournemouth Gas and Water Company | 10 | 9 | 1 |
| Briggs (executors of), Bournemouth | 1,110 | 0 | 0 |
| Buckmaster, Sydney, London | 22 | 0 | 0 |
| Cooper (salary about) | 11 | 5 | 0 |
| Dacombe Bros., Bournemouth | 16 | 16 | 0 |
| Cresswell Bros., London | 16 | 15 | 0 |
| Goldstein, Brighton | 11 | 5 | 0 |
| Good, J. T., Bournemouth | 74 | 17 | 8 |
| Hawkes, W., London | 23 | 0 | 0 |
| Hawkins, Thos., London | 15 | 13 | 0 |
| Ingram & Royle, London | 24 | 14 | 0 |
| Jennings & Styling, Marball | 70 | 0 | 0 |
| King, Hugh (rent, &c.), Bournemouth | 80 | 0 | 0 |
| Maw, Son & Thompson, London | 87 | 2 | 0 |
| Meggson & Co., London | 57 | 16 | 3 |
| Orridge & Co., London | 31 | 3 | 9 |
| Randall, Sloper & Co., Southampton | 20 | 19 | 6 |
| Ridley, Messrs., Bournemouth | 18 | 0 | 0 |
| Risdon, D. Sharp, Christchurch (about) | 300 | 0 | 0 |
| Seagar & Co., London | 32 | 0 | 9 |
| Shiller, Bournemouth | 32 | 10 | 0 |
| Silverlock, H., London | 22 | 9 | 11 |
| Summers & Co., Bristol | 26 | 0 | 0 |
| Taxes and rates (about) | 15 | 0 | 0 |
| Telephone Company (Limited), Bournemouth | 10 | 0 | 0 |
| Thomas, Messrs., Bristol | 20 | 0 | 0 |
| Wade, John, Bournemouth (about) | 15 | 0 | 0 |
| Webb-Deane, Bournemouth | 10 | 0 | 0 |
| Wills & Dorset Banking Company (Limited) | 28 | 11 | 5 |
| Worsley, J., Ryde, Isle of Wight | 40 | 0 | 0 |
| Wright, Mrs., Bournemouth | 540 | 0 | 0 |

THAT the results of trade and scientific paper advertising are much better than those of general advertising there can be no doubt. The readers of newspapers and magazines of general circulation attach but secondary importance to the advertising columns. Only those who have leisure, or are searching for information concerning a particular article, peruse such advertisements. In the case of special papers, the thing is different. A dealer would regard as disappointing a publication without advertisements, for to him the advertisements are of as much importance as the reading matter, and contain news which he turns to account.—*The Effective Advertiser*.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications with, if desired, a distinctive nom-de-plume.

What is Vinegar?

SIR,—I have read with much interest your leader upon the above subject contained in your issue of June 17; also the article entitled "Vinegar." Mr. Allen quotes a number of definitions of vinegar given by some of the leading encyclopædias and dictionaries of recent date—excellent books in their way—but it is a remarkable coincidence that he should have omitted the two oldest authorities upon food-adulteration—Mitchell and Hassall. John Mitchell's definition of vinegar in his "Treatise on the Falsifications of Food and the Chemical Means Employed to Detect Them" (1848), page 235, is as follows:—

"This is a well-known acid liquid, prepared from either sugar and water, the saccharine juices, infusions of malt, malt liquors, wine, cider, and, lastly, by the destructive distillation of wood in cast-iron cylinders. There are various kinds of vinegar in the market—viz., white vinegar, which ought to be prepared from white wine; the white vinegar sold in London, however, is more generally strong acetic or pyroligneous acid, diluted with water; such a mixture is also sold under the name of distilled vinegar." This wood vinegar or pyroligneous acid "is much employed and is exceedingly useful in preserving and pickling tongues, beef, &c."

Dr. Hassall, in his "Food: its Adulterations and the Methods for their Detection," page 628, writes:—

"Acetic acid is the volatile principle, to the presence of which, diluted with variable proportions of water, vinegar mainly owes its aroma and pungency. The different kinds of vinegar may, according to their source, be divided and classified as malt, wine, cider, beet, sugar, and wood vinegar; but occasionally other fruits, as gooseberries and currants, are employed for the manufacture of vinegar."

Conclusive evidence that wood vinegar has been understood in the trade and sold as vinegar for over half a century as well as vinegar made from malt.

Recently, at Birmingham, a vice-president of the Institute of Chemistry, stated upon oath that the term "vinegar" applied only to that made from malt and grain, and that that derived from wine was not vinegar. The Magistrates, also, in giving their decision were guided by the Pharmacopœia definition. More recently there is another case in the West of England, where the vendors have been fined for selling vinegar made solely from malt and glucose. In no instance where prosecutions have followed, I believe, has the inspector asked for "malt vinegar," but I imply for "vinegar," and therefore, I maintain, he has been legally supplied with the article he asked for. It is simply a question of trade custom and nomenclature similar to that of soda-water. As to vinegar-essences, your contributors state: "In fact, certain of the preparations are apparently prepared for the express purpose of deceiving even the very elect as to their true nature." This certainly requires explanation; for if all the ingredients are skillfully adjusted, wherein will the product differ from wine or malt vinegar? How can it affect or be sold to the prejudice of the purchaser if essentially of the nature of malt vinegar? The next prosecution of the legitimate trader by the "elect" will be soap. Chemists, beware! You have four vinegars in the Pharmacopœia, likewise three soaps, and all are commercially sold under the name of soap.

WILLIAM JOHNSTONE, Ph.D.

1 Arundel Street, Strand.

SIR,—In your leading article "What is Vinegar?" you say that "the one authority which is definite is the British Pharmacopœia."

We beg to draw your attention to the fact the B.P. definition of acetic acid is as follows:—

"An acid liquid obtained from wood by destructive distillation and subsequently purified."

Notwithstanding this definition, acetum cantharidis and acetum scillæ—both made from acetic acid and not from B.P. vinegar—are described in the Pharmacopœia as "vinegar of cantharides" and "vinegar of squill" respectively. It would therefore appear that a preparation of acetic acid can be described as a vinegar on the authority of the British Pharmacopœia.

Yours faithfully,

95A Southwark Street, S.E., STEVENSON & HOWELL.

June 16.

Ginger-wine Essence.

SIR,—I was glad to notice that the reply of the Board of Inland Revenue to Mr. Rouchetti in last week's *C. & D.* was identical with the reply sent to some others, and as you have already published one it is unnecessary to repeat it. Its importance, however, should not be overlooked by the trade, as so recently as March 11 the Board refused to allow the manufacture and sale of this essence if it contained over 3 per cent. proof spirit. In my former letters to the Board of Inland Revenue I suggested that where about an equivalent of acid were present in the essence they might safely allow its manufacture and sale, as the acid in addition to the capsicum and ginger, rendered it quite unfit for use as a beverage until largely diluted.

The combined efforts of various members of the trade have brought the Board to see that their previous contentions were quite unreasonable and untenable, or they would not have climbed down so rapidly as they have done. And the ventilating of this question through the Press has had the desired effect of granting to chemists what was undoubtedly their just rights.

I am, yours truly,

JOHN W. SUTHERLAND.

68 High Street, Dumfries, June 20.

Carbolic-acid Soaps for Dog-washing.

SIR,—In the paragraph 49/63, replying to "S. A. W.," which appeared in your paper of June 8, we notice a statement that fatal cases of poisoning from the use of carbolic soaps have come under the notice of canine surgeons.

We consider this statement is due to some misapprehension on the part of the author, as our carbolic soft soap is regularly used for dogs in this country, India, and the colonies without our having as yet one report about any injurious effects from its use.

We have known it used weekly on two puppies since they were two months old, and not the slightest ill-effect has it produced, whilst it has kept them perfectly free from insects and preserved their coats in excellent condition.

Yours truly,

Bradford, Manchester, June 20. F. C. CALVERT & Co.

The Sale of Poisons by Unqualified Assistants.

SIR,—I write to put before the trade what I consider a most unjust act on the part of the Pharmaceutical Society.

I have a small branch shop in which I employ an unqualified assistant, who has sold a poison to a representative of the Society. I visit the branch twice a day, and remain for some time, varying from one to two hours. My assistant has received notice from the Society's solicitors of their intention to recover the penalty of 5*l.* and costs for making the sale above mentioned.

I consider it beyond the intention of the Pharmacy Act that the unqualified assistant of a registered chemist, carrying on a business under his personal supervision, should be prosecuted in this way for selling a poison during his principal's absence.

There are not, I should think, 10 per cent. of the chemists in England who employ a qualified man, and few would expect that during their absence their representative would render himself liable to a penalty for selling a poison if not qualified.

This is not what the Pharmacy Act was intended to stop, but the sale of poison by grocers, herbalists, oilmen, &c., who had received no knowledge of drugs or poisons whatever. If we are to be persecuted by the Society in this way, we shall be compelled to employ none but qualified men to serve.

Chemists are the sole supporters of the Society, and they are contributing funds to its support for the benefit of the trade. I cannot think that the use of its members' money in this way will benefit the trade, nor do I think that those contributing are prepared for their assistants to be prosecuted by its authorities should they allow their assistants to sell poison under circumstances such as mine.

I give below an analysis of the style in which "chemists' " shops are carried on in this town, showing ample scope for the proper use of the Pharmacy Act, without the persecution of men who have passed the legal examinations.

Yours respectfully,

June 20.

HENRY. (61/56.)

[We publish the above with astonishment and regret. We omit the latter part of the letter, in which "Henry" aims to show that in the town where he lives there are a number of infringements of the Act, and then further criticises the action of the Pharmaceutical Society, to which he says he has subscribed for ten years.

Does this gentleman really mean to say that he has not been aware that his unqualified assistant was rendering himself liable to a penalty every time he sold a poison except under the direct supervision of some one who was legally qualified? Why, the very case on which the High Court decision was obtained, which made the law clear on this point, was an analogous case. The defendant was an unqualified assistant in the branch shop of a qualified chemist. And in that branch, too, there was a qualified manager, who happened to be out that Sunday evening when the poison was sold. If "Henry" did not know all this, he is not to be sympathised with, because he ought to have known it, and has had abundant opportunity of knowing it. If he did know it, his argument amounts simply to a claim that he, by paying a guinea a year to the Pharmaceutical Society, may buy exemption from those provisions of the Pharmacy Act which the Society only can enforce. Our sympathies are entirely with the Pharmaceutical Society in this matter. They have a delicate duty to perform, and they are liable to much undeserved unpopularity if they use their powers fairly all round. But we would rather see them neglect the Pharmacy Act altogether than apply it exclusively against companies and traders from whom they have nothing to lose.

[—EDITOR, C. & D.]

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmac and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY, page 152 et seq.

56/59. *Picrana*.—You must have a licence under the Explosives Act before you may store carbazotic or picric acid. If you get that you will have to satisfy the Department as to your method of storing. See note on page 191 of this volume (February 4, 1893).

59/70. *Ben Zoini*.—The only definite statement in your letter alleging illegality against the trader to whom you refer is that "he sells poisonous drugs to the public." It is not illegal for him to keep a shop which looks like a chemist's; it is not illegal for him to compound prescriptions so long as these do not contain scheduled poisons. He can hardly be fined because the publisher of a local directory describes him as a chemist. We quite agree that such practices on the part of an unregistered person are objectionable, but definite evidence of the sale of a scheduled poison, or of the assumption of the title would have to be adduced if any prosecution were undertaken. If you can produce such evidence, and will lay it before the Secretary of the Pharmaceutical Society, 17 Bloomsbury Square, steps to protect the public will probably be taken.

61/21. *Progress* makes a vinegar from sherry and acetic acid and calls it "best table vinegar," and asks whether he is liable in any way as regards Somerset House. We suppose he means, must he pay a vinegar-licence? The penalty for making vinegar for sale without a licence is 100*l.*, and by a General Order issued in June, 1889, it is provided that "The preparation of acetic acid for sale as vinegar by any means other than mere dilution with water renders a vinegar-maker's licence necessary." It will be wise to ask the Board whether the process followed in this case is within the exemption. We suppose "Progress" is aware that in accordance with recent decisions the sale of such a mixture is an offence against the Sale of Food and Drugs Act. So it is to sell as white-wine vinegar a dilute acetic acid, though the preparation of this latter obviously would not necessitate a licence. We ask correspondents when they ask questions on several subjects to send them on separate sheets.

57/52. A is in partnership with B, and the agreement contains the following clause:—

"And in the event of the said B wilfully misbehaving himself, becoming dishonest, or neglecting the said business, the said A shall be at liberty, by giving seven days' notice in writing to the said B, to annul these articles of partnership, and his (B's) share in the partnership shall become forfeit without any further proceeding at law or otherwise by the said A."

A says that, in addition to neglecting the business, B is keeping a woman who comes to the business from time to time. Would that circumstance be looked upon in the eye of the law as wilfully misbehaving himself?

[There is no authority, so far as we know, to guide us in this case. As a rule, the only misconduct the Court acts upon is misconduct in the partnership business, but there might be such outside misconduct as would bring the firm into disrepute, and that would give ground for dissolution. The immorality in this case would certainly be an aggravating circumstance which would be taken into account when the partner's additional neglect of business had to be considered. The best plan would be to have the accounts made up to, say, June 30, and to give the defaulting partner seven days' notice to terminate the partnership on that day and leave him to take such steps as he thought fit. Unless sufficient neglect of business can be shown, we are afraid that the immorality would not be enough ground for dissolution.]

61/63. *J. Quirke (Limited)*, Tullamore, write to us in reference to the action brought against them by the Pharmaceutical Society of Ireland, stating that the business has been carried on for the past fifty-five years, during which it has earned and retained the confidence of all the surgeons and physicians in the locality, and that no misadventure ever occurred in it. A qualified pharmaceutical chemist is in charge, and resident on the premises, and the secretary (against whom the action was brought) served a five-years' apprenticeship to his father—the late owner of the house, a fully-qualified apothecary—and had other experience. Our limited friends must be informed that their secretary's gifts and graces have no concern whatever with the legal point raised. The question at issue is whether Mr. Constantine Quirke, being unregistered under the Irish Pharmacy Act, can legally be the managing-director of a company which keeps open shop for the sale of poisons and the compounding of medical prescriptions.

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulae, educational or other specific information can be obtained from the Publisher.

57/64. *Ferri Carb*.—The Poultry-powder consists of glauber salts, common salt, and sulphate of iron principally, flavoured with creasote.

50/74. *Novice*.—A saline from the salts of fruits :—

| | |
|----------------------------------|-------|
| Dried sulphate of magnesia | 3iss. |
| Bicarbonate of soda | 3ij. |
| Tartaric acid | 3iss. |
| Cream of tartar | 3iss. |
| Powdered white sugar | 3vj. |

Mix.

Mixed Spices (Whole).—You do not mention the purpose. For cooking, there is nothing better than Jamaica pepper-corns; and for wines, &c. :—

| | Oz. |
|----------------|-----|
| Pimento | 8 |
| Mace | 1½ |
| Cinnamon | 2 |
| Cloves | 2 |
| Ginger | 2½ |

All to be roughly bruised and mixed.

Spiced Vinegar :—

| | Oz. |
|-----------------------|-----|
| Salt | 3 |
| Bruised ginger | 1½ |
| Cayenne pods | ½ |
| Ground allspice | ½ |

Macerate seven days, and strain.

When this is made with acid. acetic (1 in 6) it gives a strong pickling vinegar suitable for red cabbage or beetroot. You may make a concentrated spiced vinegar by increasing the quantities of spices and strong acid proportionately.

50/61. *F. E.*—The best Treatment for **Roseola** extending over trunk and limbs is the free use of alkalies and salines, a milk diet, and fresh wholesome fruits. Try this mixture :—

| | |
|-------------------------|--------|
| Liq. ammon. acet. | 3j. |
| Pot. bicarb. | 5iss. |
| or | |
| Magn. carb. | 3ij. |
| Syr. aurant. | 3iv. |
| Aqua ad | 3viij. |

Sig. : 3j. every four hours.

Spruce-beer Powder :—

| | |
|-------------------------|------|
| Essence of spruce | 5ij. |
| Ground rice | 3j. |
| White sugar | 3ij. |

M. Ft. pulv.

This is sufficient for 3 gallons of beer. Two pounds of ordinary brown sugar to be dissolved in 2 gallons boiling water, the powder added and fermented with yeast floated upon toast for twenty-four hours, then bottle and tie down the corks. **Liquid** : Put up the essence with suitable directions, using treacle in place of the sugar, ferment, and bottle in the same manner.

55/40. *Cattle-oils*.—The sample of **Oils to Cure all Diseases of Cattle** would indicate something like this :—

| | |
|----------------------|----------|
| Burbaeos tar | 8 oz. |
| Linsed oil | 4 parts. |
| Turpentine | 4 pints. |
| Oil of vitriol | 4 oz. |

Mix the first three, add the oil of vitriol, and, when cold, 1 ½ oz. oil of organum or rosemary.

For such a preparation your proposed labels would suit.

53/39. *Amyli*.—To Dilute Extract of Rennet from a strength that 1 oz. is sufficient for 40 oz. of milk to an essence to be used 1 oz. to a gallon of milk you cannot use anything better than a 1-to-10 solution of common salt in water slightly acidulated with hydrochloric acid. For **Rennet Tablets** have you tried Burroughs, Wellcome? How would their zymine tabloids do?

55/22. *Syntax*.—To Clear Peaty Water in large quantity, so as to obtain a nice bright water instead of a dingy brown one, should recommend a solution of permanganate

of potash, or soda acidulated slightly with sulphuric acid and filtration, or perhaps for some purposes the addition of lime hydrate to the water would prove useful.

54/53. *Phanix*.—Preparations of boracic acid and salicylic acid under various fanciful names are used to **Preserve Cream**, &c. We do not know of any substance that will restore it when once it has gone bad.

55/60. *A. B. C.*—**Phosphoric Acid** may be used as a preventive to fermentation. So also may sulphuric acid, which at one time was allowed to be mixed with vinegar for this purpose. You will find, however, that salicylic acid is most suitable for the purpose you name.

39/32. *P. J. A.*—In a case where you consider our "Veterinary Counter Practice" too valuable a book to trust in the hands of your customers, you might recommend either "Law's Farmers' Veterinary Adviser" (MacLachlan & Stewart), 7s. 6d., or "The Farmer's Veterinary Adviser" (Nimmo), 18s. 6d.

54/27. *L. y. De. S.*—There are various methods in use for recovering tin from tin-plates, such as old cans and waste cuttings. (1) By passing gaseous hydrochloric acid into a chamber containing the tin-plates, &c., loosely packed, until the iron begins to be acted upon, add water to dissolve the tin chloride, and precipitate the metallic tin in powder by the action of zinc or iron. Wash in dilute sulphuric acid and remelt. (2) By boiling with soda-ley and adding litharge in small quantities during the boiling—the lead oxide is reduced to metallic lead, and a solution of sodium stannate is obtained, which is sold to dyers. (3) By acting upon the plates with chlorine gas when the tin volatilises as chloride even at ordinary temperatures, the iron not being changed.

INFORMATION SUPPLIED.**Furniture-paste :—**

| | |
|------------------|---------|
| Ceresine | 3½ lbs. |
| Turpentine | ½ gall. |
| Resin | ½ lb. |
| Vermillion | 1 oz. |

M. sec. art.

FRANK ENGLISH.

A Note for Insect-hunters.—Night-flying moths are lured to their doom by spreading in long narrow streaks upon tree-trunks, after darkness has set in, a delectable compound consisting of the thickest and coarsest of treacle flavoured with a generous wineglassful of the cheapest and commonest of rum. This combination of sweetness and strength has for many moths a potent and altogether irresistible attraction. They will detect its fragrant odour from afar, and come in their hundreds and thousands to feast upon it. The collector then has only to light his lantern and take a plentiful stock of willow-chip pill-boxes and proceed to capture such of the visitors as he may wish to preserve.

F. H. A.

Pigeon Medicines.—I notice in your **Miscellaneous Inquiries** a case of pigeons dying. I am sure the misfortune came from the eucalyptus oil. I have tried it on certain birds (tumblers), and found as small a dose as $\frac{1}{20}$ drop, given mixed with S.V.R. on a pea, cause the pigeon to stagger and in one case to die. THOS. W. MACKENZIE, Liverpool.

Bals. Sulph.—Sulph. sub. 1, ol. olive 4. Boil till it dissolves. Have made it many times. See Gray's "Supplement," page 680. S. C. NUTMAN, Leicester.

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, post-card replies to the following :—

49/65. Address of Clotix Company.

54/56. Syrup. ferri perchlor. (Weld) : what is it?

62/74. Maker of Mist. Bismuth Company Conc. Sattler.